Hide Items Restore Clear Cancel

DATE: Wednesday, June 06, 2007

Hide?	<u>Set</u> <u>Name</u>	Query	<u>Hit</u> Count
	DB=Pe	GPB,USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ	
Ĺ	L1	((mitiglinide) near12 (diabetic or diabetes or postprandial or glycemia or glucose or complication or hypoglycemia))	26

END OF SEARCH HISTORY

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	282	mitiglinide	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 11:15
S2	19	S1 AND @pd<"20030606"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 16:36
S3	282	mitiglinide or mitigilinide or mitglinide or mitiglnide or mitiginide	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/23 08:11
S4	24	S3 near11 (diabet\$ OR Diabetic OR diabetes or complication or glycemic or glucose)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/23 08:14
S5	275	S3 and (diabet\$ OR Diabetic OR diabetes or complication or glycemic or glucose)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/23 08:13
S6	184	S3 same (diabet\$ OR Diabetic OR diabetes or complication or glycemic or glucose)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/23 08:13
S7	142	S3 with (diabet\$ OR Diabetic OR diabetes or complication or glycemic or glucose)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 10:55

	·······	·				
S8	285	mitiglinide or mitigilinide or mitglinide or mitiglnide or mitiginide	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 10:55
S9	143	S8 with (diabet\$ OR Diabetic OR diabetes or complication or glycemic or glucose)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 10:55
S10	143	S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 10:55
S11	751036	mitiglinide calcium hydrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 10:55
S13	28	mitiglinide calcium hydrate	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2007/05/24 10:56

S14	99	("20050267195" "20050215607" ."6365176" "6251926" "20030040490" "20070072813" "6277877" "5981488" "6380223" "5932258" "20060188443" "4360019" "20050272640" "6268343" "6372244" "20050203001" "6376549" "6432993" "6143786" "6355635" "6287586" "6461870" "6458378" "6835400" "7183266" "20030012807" "20030017191" "20030125301" "20040185129" "5523087" "20060122244" "5597893" "6316429" "5919216" "20020193344" "20060257987" "20070037812" "20070066683" "20070082907" "6294538" "6362009" "6414149" "6414126" "6221633" "6221633" "6251905" "6297269" "6677358" "6316489" "6369075").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 11:17
S15	98	("20050215607" "20050267195" "20030040490" "6251926" "6365176" "6268343" "6376549" "20060188443" "6432993" "20070072813" "5932258" "6380223" "6414126" "5981488" "6277877" "6380398" "6316038" "6323237" "6413946" "6440951" "6355635" "4360019" "6458378" "6835400" "7183266" "20030012807" "20040185129" "20050272640" "20040185129" "20050272640" "20040229774" "5284845" "6458924" "6258834" "6369075" "6399601" "6441015" "6451783" "20050143424" "6054587" "6287586" "6294672" "6461870" "5919216" "20060257987" "20070037812" "20070066683" "20070082907" "6329403" "6294538").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR .	ON	2007/05/24 11:17
S16		S14 or S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 11:59

	ı		1	1		
S17	285	mitiglinide	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 11:59
S18	121	S16 NOT S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/24 11:59
S19	569	(514/412).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/05/25 11:25
S20	829	(514/310).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/05/25 11:25
S21	1492	(514/563).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/05/25 11:25
S22	2872	S19 or S20 or S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR .	ON	2007/05/25 11:26
S23	2243	S22 and @pd<"20050930"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 11:29

S24	1868	S22 and @pd<"20040930"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 11:29
S25	349	S19 and @pd<"20040930"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 11:30
S26	683	(S20 or S21) and diabetes	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 12:46
S27	794	(S20 or S21) and diabet\$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 12:47
S28	399	S27 and @pd<"20040930"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 12:49
S29	792	S27 not S25	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ÖR	ON ,	2007/05/25 12:49
S30	792	S27 NOT S25	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/25 12:49

S31	1658	MIKOSHIBA.in.	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2007/05/31 11:32
			EPO; JPO; DERWENT; IBM_TDB			
S32	309100	SUZUKI.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/31 11:32
S33	460206	SUZUKI, HISAO.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/31 11:32
534	542	SUZUKI near HISAO.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/31 11:33
S36	26	KIYONO near YUJI.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/31 11:33
S38	2213	S31 or S34 or S36	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR .	ON	2007/05/31 11:34
S39	12	S38 and diabetes	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR .	ON	2007/05/31 11:34

S40	7	S38 and diabetes	USOCR; FPRS;	OR	ON	2007/05/31 11:34
			EPO; JPO; DERWENT			

ANSWER SUMMARY

L2 ANSWER 1 OF 1416 CAPLUS

Voltage regulator [machine translation]; 2007:536206 CAPLUS

L2 ANSWER 2 OF 1416 CAPLUS

An optical drive having a laser driver device with an adjustable power level; 2007:512519 CAPLUS

L2 ANSWER 3 OF 1416 CAPLUS

PCR detection of Reg IV mRNA for cancer diagnosis; 2007:485237 CAPLUS

L2 ANSWER 4 OF 1416 CAPLUS

2-Propenoic acid, methyl ester, polymer with ethenyl acetate, hydrolyzed, sodium salts; tolerance exemption; 2007:473041 CAPLUS

L2 ANSWER 5 OF 1416 CAPLUS

Roles of CD4+CD25+ T cells in the development of experimental murine allergic conjunctivitis; 2007:471425 CAPLUS

L1 ANSWER 1 OF 90 CAPLUS

Combinations of metformin and meglitinide; 2007:537722 CAPLUS

L3 ANSWER 1 OF 4 REGISTRY

 $(\alpha S, 3aR, 7aS)$ - octahydro- γ -oxo- α -(phenylmethyl)-2H-Isoindole-2-butanoic acid, calcium salt (2:1); 145525-41-3 REGISTRY

L3 ANSWER 1 OF 4 REGISTRY

 $(\alpha S, 3aR, 7aS)$ - octahydro- γ -oxo- α -(phenylmethyl)-2H-Isoindole-2-butanoic acid, calcium salt (2:1); 145525-41-3 REGISTRY

L3 ANSWER 2 OF 4 REGISTRY

 $(\alpha S, 3aR, 7aS)$ - octahydro- γ -oxo- α -(phenylmethyl)-2H-Isoindole-2-butanoic acid; 145375-43-5 REGISTRY

L3 ANSWER 3 OF 4 REGISTRY

hydrochloride (1:2) 4-[3-[2-(trifluoromethyl)-10H-phenothiazin-10-yl]propyl]-1-Piperazineethanol; 146-56-5 REGISTRY

L3 ANSWER 4 OF 4 REGISTRY

4-chloro- α -(4-chlorophenyl)- α -(trichloromethyl)- Benzenemethanol; 115-32-2 REGISTRY

L7 ANSWER 1 OF 85 CAPLUS

Combinations of metformin and meglitinide; 2007:537722 CAPLUS

L7 ANSWER 2 OF 85 CAPLUS

Carboxyl-glucuronidation of mitiglinide by human UDP-glucuronosyltransferases; 2007:453224 CAPLUS

L7 ANSWER 3 OF 85 CAPLUS

Mitgilinide and α -glucosidase inhibitor combination for type 2 diabetes therapy; 2007:404898 CAPLUS

L7 ANSWER 4 OF 85 CAPLUS

Combination therapy for controlled carbohydrate digestion, decreased formation of intestinal gas, and modulation of insulin signaling or blood glucose levels; 2007:329618 CAPLUS

L7 ANSWER 5 OF 85 CAPLUS

Administration of dipeptidyl peptidase inhibitors; 2007:287177 CAPLUS

L4 ANSWER 1 OF 6 CAPLUS

Characterization of the action of S 21403 (mitiglinide) on insulin secretion and biosynthesis in normal and diabetic β -cells; 2005:1205798 CAPLUS

L4 ANSWER 2 OF 6 CAPLUS

Pharmacological and clinical profile of mitiglinide calcium hydrate (Glufast), a new insulinotropic agent with rapid onset; 2004:836630 CAPLUS

L4 ANSWER 3 OF 6 CAPLUS

Rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-hyperglycemia agent. comparison with glimepiride; 2004:496322 CAPLUS

L4 ANSWER 4 OF 6 CAPLUS

Rapid onset-insulinotropic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostpradial hyperglycemic agent: comparison with nateglinide; 2004:345396 CAPLUS

L4 ANSWER 5 OF 6 CAPLUS

Characterization of hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel hypoglycemic agent: comparison with glibenclamide, a sulfonylurea; 2004:345395 CAPLUS

L4 ANSWER 6 OF 6 CAPLUS

Effects of S 21403 on hormone secretion from isolated rat pancreas at different glucose concentrations; 2002:894053 CAPLUS

L1 ANSWER 1 OF 2 REGISTRY

 $(\alpha S, 3aR, 7aS)$ - octahydro- γ -oxo- α -(phenylmethyl)-2H-Isoindole-2-butanoic acid, calcium salt (2:1); 145525-41-3 REGISTRY

L3 ANSWER 1 OF 129 CAPLUS

Combinations of metformin and meglitinide; 2007:537722 CAPLUS

L3 ANSWER 2 OF 129 CAPLUS

Mitgilinide and α -glucosidase inhibitor combination for type 2 diabetes therapy; 2007:404898 CAPLUS

L3 ANSWER 3 OF 129 CAPLUS

Combination therapy for controlled carbohydrate digestion, decreased formation of intestinal gas, and modulation of insulin signaling or blood glucose levels; 2007:329618 CAPLUS

L3 ANSWER 4 OF 129 CAPLUS

Administration of dipeptidyl peptidase inhibitors; 2007:287177 CAPLUS

L3 ANSWER 5 OF 129 CAPLUS

Administration of dipeptidyl peptidase inhibitors; 2007:287142 CAPLUS

L3 ANSWER 6 OF 129 CAPLUS

Study on environmental risk assessment of drugs: excretion forms to environment; 2007:276713 CAPLUS

L3 ANSWER 7 OF 129 CAPLUS

High-performance liquid chromatography-electrospray ionization mass spectrometry determination of Mitiglinide in human plasma and its pharmacokinetics; 2007:207390 CAPLUS

L3 ANSWER 8 OF 129 CAPLUS

Sulfonylureas and glinides exhibit peroxisome proliferator-activated receptor γ activity: a combined virtual screening and biological assay approach; 2007:141807 CAPLUS

L3 ANSWER 9 OF 129 CAPLUS

Potassium channel blockers for treatment of migraine and headache; 2007:88262 CAPLUS L3 ANSWER 10 OF 129 CAPLUS

Preparation of N-terminally modified GLP-1 receptor modulators and their use in the

treatment of diabetes and related conditions; 2006:1253322 CAPLUS

L5 ANSWER 1 OF 91 CAPLUS

Long-term effect of combination therapy with mitiglinide and once daily insulin glargine in patients who were successfully switched from intensive insulin therapy in short-term study; 2007:548465 CAPLUS

L5 ANSWER 2 OF 91 CAPLUS

Combinations of metformin and meglitinide; 2007:537722 CAPLUS

L5 ANSWER 3 OF 91 CAPLUS

Carboxyl-glucuronidation of mitiglinide by human UDP-glucuronosyltransferases; 2007:453224 CAPLUS

L5 ANSWER 4 OF 91 CAPLUS

Mitgilinide and α -glucosidase inhibitor combination for type 2 diabetes therapy; 2007:404898 CAPLUS

L5 ANSWER 5 OF 91 CAPLUS

Combination therapy for controlled carbohydrate digestion, decreased formation of intestinal gas, and modulation of insulin signaling or blood glucose levels; 2007:329618 CAPLUS

L5 ANSWER 6 OF 91 CAPLUS

Administration of dipeptidyl peptidase inhibitors; 2007:287177 CAPLUS

L5 ANSWER 7 OF 91 CAPLUS

Administration of dipeptidyl peptidase inhibitors; 2007:287142 CAPLUS

L5 ANSWER 8 OF 91 CAPLUS

Sulfonylureas and glinides exhibit peroxisome proliferator-activated receptor γ activity: a combined virtual screening and biological assay approach; 2007:141807 CAPLUS

L5 ANSWER 9 OF 91 CAPLUS

Preparation of N-terminally modified GLP-1 receptor modulators and their use in the treatment of diabetes and related conditions; 2006:1253322 CAPLUS

L5 ANSWER 10 OF 91 CAPLUS

Preparation of pyrazole compounds as hepatic glycogen phosphorylase inhibitors and therapeutic agents for diabetes; 2006:1252442 CAPLUS

L5 ANSWER 11 OF 91 CAPLUS

Combined pharmaceutical preparation for treatment of type 2 diabetes; 2006:1157536 CAPLUS

L5 ANSWER 12 OF 91 CAPLUS

Imaging docking and fusion of insulin granules induced by antidiabetes agents. Sulfonylurea and glinide drugs preferentially mediate the fusion of newcomer, but not previously docked, insulin granules; 2006:1056090 CAPLUS

L5 ANSWER 13 OF 91 CAPLUS

Process for preparation of isoindoline derivatives as antidiabetic agents; 2006:969655 CAPLUS

L5 ANSWER 14 OF 91 CAPLUS

Roflumilast for the treatment of diabetes mellitus; 2006:945768 CAPLUS

L5 ANSWER 15 OF 91 CAPLUS

Roflumilast for the treatment of diabetes mellitus and accompanying disorders, and combinations with other agents; 2006:944442 CAPLUS

L5 ANSWER 16 OF 91 CAPLUS

Effects of mitiglinide on glucose -induced insulin release into the portal vein and fat-induced triglyceride elevation in prediabetic and diabetic OLETF rats. [Erratum to document cited in CA145:262963]; 2006:898535 CAPLUS

L5 ANSWER 17 OF 91 CAPLUS

Manufacture and application of drug composition containing pioglitazone hydrochloride and mitiglinide for treating insulin-dependent diabetes mellitus; 2006:840773 CAPLUS

L5 ANSWER 18 OF 91 CAPLUS

Manufacture of dripping pill containing mitiglinide for treating diabetes mellitus; 2006:840772 CAPLUS

L5 ANSWER 19 OF 91 CAPLUS

Medicinal compositions containing hypoglycemic agents; 2006:766544 CAPLUS

L5 ANSWER 20 OF 91 CAPLUS

Manufacture of mitiglinide enteric-coated preparation; 2006:666684 CAPLUS

L5 ANSWER 21 OF 91 CAPLUS

Effects of mitiglinide on glucose -induced insulin release into the portal vein and fat-induced triglyceride elevation in prediabetic and diabetic OLETF rats; 2006:664881 CAPLUS

L5 ANSWER 22 OF 91 CAPLUS

Mitiglinide sustained-release preparation and its production method; 2006:519723

L5 ANSWER 23 OF 91 CAPLUS

Therapeutic efficacy of mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine in patients with type 2 diabetes mellitus; 2006:505268 CAPLUS

L5 ANSWER 24 OF 91 CAPLUS

Synthesis and hypoglycemic activity of mitiglinide analogs; 2006:328612 CAPLUS

L5 ANSWER 25 OF 91 CAPLUS

Mitiglinide oral preparations for the treatment of diabetes; 2006:220560 CAPLUS

L5 ANSWER 26 OF 91 CAPLUS

Rapid insulin secretagogue: Mitiglinide; 2006:64372 CAPLUS

L5 ANSWER 27 OF 91 CAPLUS

Manufacture of compound hypoglycemic drug containing mitiglinide and metformin hydrochloride; 2006:39395 CAPLUS

L5 ANSWER 28 OF 91 CAPLUS

Pharmaceutical composition for prevention or treatment of lipid metabolism disorder; 2005:1220708 CAPLUS

L5 ANSWER 29 OF 91 CAPLUS

Characterization of the action of S 21403 (mitiglinide) on insulin secretion and biosynthesis in normal and diabetic β -cells; 2005:1205798 CAPLUS

L5 ANSWER 30 OF 91 CAPLUS

Effects of S21403 (mitiglinide) on postprandial generation of oxidative stress and inflammation in type 2 diabetic patients; 2005:1009580 CAPLUS

L5 ANSWER 31 OF 91 CAPLUS

Method for examining blood glucose control state; 2005:962511 CAPLUS

L5 ANSWER 32 OF 91 CAPLUS

Preparation of 5-substituted 2H-pyrazole-3-carboxylic acid derivatives as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases; 2005:120729 CAPLUS

L5 ANSWER 33 OF 91 CAPLUS

Rapid acting insulin secretagogue in treatment for type 2 diabetes; 2005:43407 CAPLUS

L5 ANSWER 34 OF 91 CAPLUS

The impact of ATP-sensitive K+ channel subtype selectivity of insulin secretagogues for the coronary vasculature and the myocardium; 2004:1076146 CAPLUS

L5 ANSWER 35 OF 91 CAPLUS

Mitiglinide calcium dihydrate; 2004:1072015 CAPLUS

L5 ANSWER 36 OF 91 CAPLUS

Synthesis of antidiabetic mitiglinide calcium hydrate; 2004:1070406 CAPLUS

L5 ANSWER 37 OF 91 CAPLUS

A synergistic pharmaceutical combination comprising cicletanine for the prevention or treatment of diabetes; 2004:902180 CAPLUS

L5 ANSWER 38.OF 91 CAPLUS

Pharmacological and clinical profile of mitiglinide calcium hydrate (Glufast), a new insulinotropic agent with rapid onset; 2004:836630 CAPLUS

L5 ANSWER 39 OF 91 CAPLUS

Remedy for diabetes; 2004:681582 CAPLUS

L5 ANSWER 40 OF 91 CAPLUS

Rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-hyperglycemia agent. comparison with glimepiride; 2004:496322 CAPLUS

L5 ANSWER 41 OF 91 CAPLUS

Rapid onset-insulinotropic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostpradial hyperglycemic agent: comparison with nateglinide; 2004:345396 CAPLUS

L5 ANSWER 42 OF 91 CAPLUS

Characterization of hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel hypoglycemic agent: comparison with glibenclamide, a sulfonylurea; 2004:345395 CAPLUS

L5 ANSWER 43 OF 91 CAPLUS

Preparation of aroylhydroxypyrazoles for treatment of metabolic disorders; 2004:333698 CAPLUS

L5 ANSWER 44 OF 91 CAPLUS

Cardiovascular risk in type 2 diabetics and pharmacological regulation of mealtime glucose excursions; 2004:202949 CAPLUS

L5 ANSWER 45 OF 91 CAPLUS

Bicyclic oligopeptides and their use as glucagon receptor antagonists; 2004:60541 CAPLUS

L5 ANSWER 46 OF 91 CAPLUS

Bicyclic oligopeptides and their use as glucagon receptor antagonists; 2004:60532 CAPLUS

L5 ANSWER 47 OF 91 CAPLUS

Drug composition for prevention or inhibition of advance of diabetic complication; 2004:20487 CAPLUS

L5 ANSWER 48 OF 91 CAPLUS

Drug composition for blood sugar control; 2004:20486 CAPLUS

L5 ANSWER 49 OF 91 CAPLUS

Antidiabetic preparation for oral administration; 2004:3671 CAPLUS

L5 ANSWER 50 OF 91 CAPLUS.

Pharmacology of the meglitinide analogs: new treatment options for type 2 diabetes mellitus; 2003:1000347 CAPLUS

L5 ANSWER 51 OF 91 CAPLUS

Therapeutic agent for diabetes; 2003:931184 CAPLUS

L5 ANSWER 52 OF 91 CAPLUS

Uptake of tritiated mitiglinide by pancreatic pieces and islets; 2003:780556 CAPLUS L5 ANSWER 53 OF 91 CAPLUS

Combination of a HMG-CoA reductase inhibitor and an insulin secretion enhancer; 2003:777602 CAPLUS

L5 ANSWER 54 OF 91 CAPLUS

Oral pharmaceutical composition containing mitiglinide; 2003:573217 CAPLUS

L5 ANSWER 55 OF 91 CAPLUS

Use of an immediate-release powder in pharmaceutical and nutraceutical compositions; 2003:511859 CAPLUS

L5 ANSWER 56 OF 91 CAPLUS

Pharmaceutical compositions containing a renin inhibitor and antidiabetics; 2003:473243 CAPLUS

L5 ANSWER 57 OF 91 CAPLUS

Synergistic antidiabetic combinations containing antihyperlipemics and hydroximic acids; 2003:76614 CAPLUS

L5 ANSWER 58 OF 91 CAPLUS

Effects of S 21403 on hormone secretion from isolated rat pancreas at different glucose concentrations; 2002:894053 CAPLUS

L5 ANSWER 59 OF 91 CAPLUS

Processes for preparation of optically active 2-benzylsuccinic acid and optically active 2-benzylsuccinic acid monoamides; 2002:832745 CAPLUS

L5 ANSWER 60 OF 91 CAPLUS

Study of the insulinotropic effect of the novel antihyperglycemic agent KAD-1229 using HIT T15 cells, a hamster's insulinoma cell line; 2002:743481 CAPLUS

L5 ANSWER 61 OF 91 CAPLUS

Compositions comprising a polypeptide and an active agent; 2002:556104 CAPLUS

L5 ANSWER 62 OF 91 CAPLUS

Effect of KAD-1229, a novel hypoglycaemic agent, on plasma glucose levels after meal load in type 2 diabetic rats; 2002:395747 CAPLUS

L5 ANSWER 63 OF 91 CAPLUS

Compositions comprising a polypeptide and an active agent; 2002:332011 CAPLUS

L5 ANSWER 64 OF 91 CAPLUS

Drugs for diabetes, especially type 2, comprising an antiinflammatory or analgesic drug, selected bivalent linkers, and a nitrate ester; 2002:293592 CAPLUS

L5 ANSWER 65 OF 91 CAPLUS

Pharmaceutical compositions containing AT-receptor antagonist or insulin secretion enhancers; 2002:157602 CAPLUS

L5 ANSWER 66 OF 91 CAPLUS

Combinations of insulin secretion enhancer, HMG-CoA reductase inhibitors and acetylcholinesterase inhibitors; 2002:157564 CAPLUS

L5 ANSWER 67 OF 91 CAPLUS

A combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for the treatment of diabetes; 2002:51257 CAPLUS

L5 ANSWER 68 OF 91 CAPLUS

Absence of exacerbation of myocardial stunning in anesthetized dogs treated with KAD-, 1229, a novel hypoglycemic agent; 2001:864540 CAPLUS

L5 ANSWER 69 OF 91 CAPLUS

The effects of mitiglinide (KAD-1229), a new antidiabetic drug, on ATP-sensitive K+ channels and insulin secretion: comparison with the sulfonylureas and nateglinide; 2001:857058 CAPLUS

L5 ANSWER 70 OF 91 CAPLUS

Antidiabetic agents containing $\alpha\text{-glucosidase}$ inhibitors and insulin secretion promoters; 2001:635931 CAPLUS

L5 ANSWER 71 OF 91 CAPLUS

Rapid acting insulinotropic agents: restoration of early insulin secretion as a physiologic approach to improve glucose control; 2001:620286 CAPLUS

L5 ANSWER 72 OF 91 CAPLUS

Effects of mitiglinide (s 21403) on Kir6.2/SUR1, Kir6.2/SUR2A and Kir6.2/SUR2B types of ATP-sensitive potassium channel; 2001:282226 CAPLUS

L5 ANSWER 73 OF 91 CAPLUS

Effect of KAD-1229, a nonsulfonylurea hypoglycemic agent, on plasma glucose and insulin in streptozotocin-induced diabetic dogs; 2001:166771 CAPLUS

L5 ANSWER 74 OF 91 CAPLUS

Immediate-release oral pharmaceutical compositions containing benzylsuccinate derivatives; 2000:841976 CAPLUS

L5 ANSWER 75 OF 91 CAPLUS

Use of succinic acid derivatives to obtain a medicine for treating inflammation; 2000:814308 CAPLUS

L5 ANSWER 76 OF 91 CAPLUS

Recent developments and emerging therapies for type 2 diabetes mellitus; 2000:194936 CAPLUS

L5 ANSWER 77 OF 91 CAPLUS

Antidiabetic oral formulations containing benzylsuccinic acid derivative; 2000:59962 CAPLUS

L5 ANSWER 78 OF 91 CAPLUS

Effect of the Meglitinide analog S21403 on cationic fluxes and insulin release in perfused rat pancreatic islets exposed to a high concentration od D- Glucose; 1999:573477 CAPLUS

L5 ANSWER 79 OF 91 CAPLUS

Process for producing benzylsuccinic acid derivatives; 1998:527315 CAPLUS

L5 ANSWER 80 OF 91 CAPLUS

Process for producing optically active benzylsuccinic acid by optical resolution; 1998:527305 CAPLUS

L5 ANSWER 81 OF 91 CAPLUS

Effect of a novel hypoglycemic agent, KAD-1229 on glucose metabolism and fructose-2, 6- bisphosphate content in isolated hepatocytes of normal rats; 1996:730982 CAPLUS

L5 ANSWER 82 OF 91 CAPLUS

Effect of the meglitinide analog KAD-1229 on 45Ca outflow and insulin release in

pancreatic islets; 1996:647356 CAPLUS

L5 ANSWER 83 OF 91 CAPLUS

Effects of the methyl esters of pyruvate, succinate and glutamate on the secretory response to meglitinide analogs in rat pancreatic islets; 1996:584776 CAPLUS

L5 ANSWER 84 OF 91 CAPLUS

A rapid- and short-acting hypoglycemic agent KAD-1229 improves post-prandial hyperglycemia and diabetic complications in streptozotocin-induced non-insulindependent diabetes mellitus rats; 1996:536607 CAPLUS

L5 ANSWER 85 OF 91 CAPLUS

Effect of a non-sulfonylurea hypoglycemic agent, KAD-1229 on hormone secretion in the isolated perfused pancreas of the rat; 1996:269911 CAPLUS

L5 ANSWER 86 OF 91 CAPLUS

Insulinotropic action of meglitinide analogs: modulation by an activator of ATP-sensitive K+ channels and high extracellular K+ concentrations; 1996:156362 CAPLUS

L5 ANSWER 87 OF 91 CAPLUS

Insulinotropic action of (2S)-2-benzyl-3-(cis- hexahydro-2-isoindolinylcarbonyl) propionate I. Secretory and cationic aspects; 1995:747679 CAPLUS

L5 ANSWER 88 OF 91 CAPLUS

Normalization of impaired glucose tolerance by the short-acting hypoglycemic agent calcium (2S)-2-benzyl-3-(cis-hexahydro-2- isoindolinylcarbonyl)propionate dihydrate (KAD-1229) in non-insulin-dependent diabetes mellitus rats; 1995:477544 CAPLUS

L5 ANSWER 89 OF 91 CAPLUS

Inhibition of ATP-sensitive K+ channel by a non-sulfonylurea compound KAD-1229 in a pancreatic β -cell line, MIN 6 cell; 1995:231935 CAPLUS

L5 ANSWER 90 OF 91 CAPLUS

Novel rapid- and short-acting hypoglycemic agent, a calcium(2s)- 2-benzyl-3-(cis-hexahydro-2- isoindolinylcarbonyl)propionate (KAD-1229) that acts on the sulfonylurea receptor: comparison of effects between KAD-1229 and gliclazide; 1994:426648 CAPLUS

L5 ANSWER 91 OF 91 CAPLUS

Preparation of succinic acid azabicyclylamides and related compounds as antidiabetics; 1993:59584 CAPLUS

Welcome to STN International! Enter x:x

LOGINID: ssptamrf1614

PASSWORD:

NEWS HOURS

NEWS LOGIN

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
NEWS · 1
                 Web Page for STN Seminar Schedule - N. America
NEWS
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS
         JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
         JAN 22
NEWS
      6
                 CA/CAplus updated with revised CAS roles
NEWS
      7 JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS
         JAN 29
      8
                 PHAR reloaded with new search and display fields
NEWS
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
NEWS 10
         FEB . 15
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 11
         FEB 15
                 RUSSIAPAT enhanced with pre-1994 records
                 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 12
         FEB 23
NEWS 13
         FEB 26
                 MEDLINE reloaded with enhancements
NEWS 14
         FEB 26
                 EMBASE enhanced with Clinical Trial Number field
NEWS 15
         FEB 26
                 TOXCENTER enhanced with reloaded MEDLINE
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 16
         FEB 26
NEWS 17
                 CAS Registry Number crossover limit increased from 10,000
         FEB 26
                 to 300,000 in multiple databases
NEWS 18
         MAR 15
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
         MAR 16
NEWS 19
                 CASREACT coverage extended
NEWS 20
         MAR 20
                 MARPAT now updated daily
NEWS 21
         MAR 22
                 LWPI reloaded
NEWS 22
         MAR 30
                 RDISCLOSURE reloaded with enhancements
NEWS 23
         APR 02
                 JICST-EPLUS removed from database clusters and STN
                 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 24
         APR 30
NEWS 25
         APR 30
                 CHEMCATS enhanced with 1.2 million new records
                 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 26
         APR 30
NEWS 27
         APR 30
                 INPADOC replaced by INPADOCDB on STN
NEWS 28
         MAY 01
                 New CAS web site launched
NEWS 29
         MAY 08
                 CA/CAplus Indian patent publication number format defined
         MAY 14
NEWS 30
                 RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
         MAY 21
NEWS 31
                 BIOSIS reloaded and enhanced with archival data
NEWS 32
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS 33
         MAY 21
                 CA/CAplus enhanced with additional kind codes for German
                 patents
         MAY 22
NEWS 34
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
```

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT

Welcome Banner and News Items

MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),

STN Operating Hours Plus Help Desk Availability

AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 17:36:28 ON 22 MAY 2007

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:36:43 ON 22 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 May 2007 VOL 146 ISS 22 FILE LAST UPDATED: 21 May 2007 (20070521/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> e	mitiglinide	
E1	1	MITIGEAGE/BI
E2	· 1	MITIGEN/BI
E3	90>	MITIGLINIDE/BI
E4	1	MITIGLNIDE/BI
E5	4	MITIGRATION/BI
E6	1	MITIGTION/BI
E7	2	MITII/BI
E8	· 1	MITIKAS/BI
E9	1	MITIKO/BI
E10	1	MITIKOGANE/BI
E11	1	MITILAN/BI
E12	3	MITILANE/BI
=> S	e3-4	

90 MITIGLINIDE/BI

1 MITIGLNIDE/BI

'L1 90 (MITIGLINIDE/BI OR MITIGLNIDE/BI)

=> s reg

1347 REG

82 REGS

L2

1416 REG

(REG OR REGS)

=> d l2 1-5 ibib

- L2 ANSWER 1 OF 1416 CAPLUS COPYRIGHT 2007 ACS on STN
- L2 ANSWER 2 OF 1416 CAPLUS COPYRIGHT 2007 ACS on STN
- L2 ANSWER 3 OF 1416 CAPLUS COPYRIGHT 2007 ACS on STN
- L2 ANSWER 4 OF 1416 CAPLUS COPYRIGHT 2007 ACS on STN
- L2 ANSWER 5 OF 1416 CAPLUS COPYRIGHT 2007 ACS on STN

=> his

HIS IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d his

(FILE 'HOME' ENTERED AT 17:36:28 ON 22 MAY 2007)

FILE 'CAPLUS' ENTERED AT 17:36:43 ON 22 MAY 2007

E MITIGLINIDE

Ll L2

90 S E3-4 1416 S REG

=> s l1 AND diabet

=> d l1 IBIB

L1 ANSWER 1 OF 90 CAPLUS COPYRIGHT 2007 ACS on STN

=> file registry COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 16.87

SESSION 17.08

FILE 'REGISTRY' ENTERED AT 17:41:33 ON 22 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 MAY 2007 HIGHEST RN 935505-97-8 DICTIONARY FILE UPDATES: 21 MAY 2007 HIGHEST RN 935505-97-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e mitiglinide
E1
                     MITIGAL/BI
              1
E2.
                     MITIGAN/BI
E3
              2 --> MITIGLINIDE/BI
E4
                     MITIL/BI
E5
             14
                     MITILYSIN/BI
F.6
             10
                     MITIN/BI
E7
              1
                    MITINDO/BI
E8
              1
                    MITINDOMIDE/BI
E9
              4
                    MITINE/BI
E10
              2
                    MITION/BI
E11
              3
                    MITIPH/BI
E12
                    MITIPHYL/BI
=> s e2-e4
              1 MITIGAN/BI
              2 MITIGLINIDE/BI
              1 MITIL/BI
              4 (MITIGAN/BI OR MITIGLINIDE/BI OR MITIL/BI)
L3
=> d
```

L3 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN

=> d 13 1-4

- L3 ANSWER 1 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN
- L3 ANSWER 2 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN
- L3 ANSWER 3 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN
- L3 ANSWER 4 OF 4 REGISTRY COPYRIGHT 2007 ACS on STN

```
=> file caplus
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
27.30
44.38
```

FILE 'CAPLUS' ENTERED AT 17:45:07 ON 22 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December

26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 May 2007 VOL 146 ISS 22 FILE LAST UPDATED: 21 May 2007 (20070521/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 145525-41-3 OR mitiglinide REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L5

53 L4

90 MITIGLINIDE,

L6

128 L5 OR MITIGLINIDE

=> s 16 and (diabetes OR diabetic OR diabetic complication OR postprandial hypoglycemia OR glycemic control or glucose)

125073 DIABETES

65399 DIABETIC

9086 DIABETICS

69423 DIABETIC

(DIABETIC OR DIABETICS)

65399 DIABETIC

9086 DIABETICS

69423 DIABETIC

(DIABETIC OR DIABETICS)

12197 COMPLICATION

35072 COMPLICATIONS

44255 COMPLICATION

(COMPLICATION OR COMPLICATIONS)

2688 DIABETIC COMPLICATION

(DIABETIC (W) COMPLICATION)

7857 POSTPRANDIAL

1 POSTPRANDIALS

7857 POSTPRANDIAL

(POSTPRANDIAL OR POSTPRANDIALS)

13989 HYPOGLYCEMIA

48 HYPOGLYCEMIAS

14010 HYPOGLYCEMIA

(HYPOGLYCEMIA OR HYPOGLYCEMIAS)

37 POSTPRANDIAL HYPOGLYCEMIA

(POSTPRANDIAL (W) HYPOGLYCEMIA)

6108 GLYCEMIC

1587652 CONTROL

336796 CONTROLS

1806258 CONTROL

(CONTROL OR CONTROLS)

3436 GLYCEMIC CONTROL

(GLYCEMIC (W) CONTROL)

423129 GLUCOSE

823 GLUCOSES

423309 GLUCOSE

(GLUCOSE OR GLUCOSES)

L7

85 L6 AND (DIABETES OR DIABETIC OR DIABETIC COMPLICATION OR POSTPRA NDIAL HYPOGLYCEMIA OR GLYCEMIC CONTROL OR GLUCOSE)

=> d 1-5 ibib

- L7 ANSWER 1 OF 85 CAPLUS COPYRIGHT 2007 ACS on STN
- L7 ANSWER 2 OF 85 CAPLUS COPYRIGHT 2007 ACS on STN
- L7 ANSWER 3 OF 85 CAPLUS COPYRIGHT 2007 ACS on STN
- L7 ANSWER 4 OF 85 CAPLUS COPYRIGHT 2007 ACS on STN
- L7 ANSWER 5 OF 85 CAPLUS COPYRIGHT 2007 ACS on STN

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 29.89 75.19

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 17:47:35 ON 22 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 18, 2007 (20070518/UP).

- \

---Logging off of STN---

Executing the logoff script...

=> LOG Y ·

 COST IN U.S. DOLLARS
 SINCE FILE TOTAL

 ENTRY
 SESSION

 FULL ESTIMATED COST
 0.06
 75.25

STN INTERNATIONAL LOGOFF AT 17:48:21 ON 22 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptamrf1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                 Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS
      3
         JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS
         JAN 22
                 CA/CAplus updated with revised CAS roles
NEWS
      7
         JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS
      8
         JAN 29
                 PHAR reloaded with new search and display fields
NEWS 9
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
                 PATDPASPC enhanced with Drug Approval numbers
         FEB 15
NEWS 10
         FEB 15
NEWS 11
                 RUSSIAPAT enhanced with pre-1994 records
         FEB 23
NEWS 12
                 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13
         FEB 26
                 MEDLINE reloaded with enhancements
                 EMBASE enhanced with Clinical Trial Number field
NEWS 14
         FEB 26
NEWS 15
         FEB 26
                 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16
         FEB 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
                 CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 18 MAR 15
NEWS 19
         MAR 16
                 CASREACT coverage extended
NEWS 20 MAR 20
                MARPAT now updated daily
NEWS 21 MAR 22
                LWPI reloaded
NEWS 22 MAR 30
                RDISCLOSURE reloaded with enhancements
NEWS 23 APR 02
                 JICST-EPLUS removed from database clusters and STN
NEWS 24 APR 30
                 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25 APR 30
                CHEMCATS enhanced with 1.2 million new records
NEWS 26 APR 30
                CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27 APR 30
                 INPADOC replaced by INPADOCDB on STN
NEWS 28
        MAY 01
                 New CAS web site launched
NEWS 29
        MAY 08
                 CA/CAplus Indian patent publication number format defined
NEWS 30
        MAY 14
                 RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
NEWS 31
        MAY 21
                 BIOSIS reloaded and enhanced with archival data
NEWS 32
        MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS 33
        MAY 21
                 CA/CAplus enhanced with additional kind codes for German
         MAY 22
NEWS 34
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
NEWS EXPRESS
             NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
```

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN · Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific

research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 17:50:50 ON 22 MAY 2007

=> d his

(FILE 'HOME' ENTERED AT 17:50:50 ON 22 MAY 2007)

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

0.21

0.21

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 17:51:10 ON 22 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 May 2007 VOL 146 ISS 22 FILE LAST UPDATED: 21 May 2007 (20070521/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> d his

(FILE 'HOME' ENTERED AT 17:50:50 ON 22 MAY 2007)

FILE 'CAPLUS' ENTERED AT 17:51:10 ON 22 MAY 2007

=> s 145525-41-3

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L2

53 L1

 => s 13 and (diabetic or diabetes or diabetic complication or postprandial or glycemic or glucose)

65399 DIABETIC

9086 DIABETICS

69423 DIABETIC

(DIABETIC OR DIABETICS)

125073 DIABETES

65399 DIABETIC

9086 DIABETICS

69423 DIABETIC

(DIABETIC OR DIABETICS)

12197 COMPLICATION

35072 COMPLICATIONS

44255 COMPLICATION

(COMPLICATION OR COMPLICATIONS)

2688 DIABETIC COMPLICATION

(DIABETIC (W) COMPLICATION)

7857 POSTPRANDIAL

1 POSTPRANDIALS

7857 POSTPRANDIAL

(POSTPRANDIAL OR POSTPRANDIALS)

6108 GLYCEMIC

423129 GLUCOSE

823 GLUCOSES

423309 GLUCOSE

(GLUCOSE OR GLUCOSES)

6 L3 AND (DIABETIC OR DIABETES OR DIABETIC COMPLICATION OR POSTPRA NDIAL OR GLYCEMIC OR GLUCOSE)

=> d 1-6

- L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- L4 ANSWER 2.0F 6 CAPLUS COPYRIGHT 2007 ACS on STN
- L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE ENTRY

TOTAL

FULL ESTIMATED COST

ENTRY SESSION

26.11 27.24

FILE 'STNGUIDE' ENTERED AT 17:52:35 ON 22 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: May 18, 2007 (20070518/UP).

=> save

ENTER L#, L# RANGE, ALL, OR (END):all
ENTER NAME OR (END):10519102
10519102 IS NOT A VALID SAVED NAME
Enter the name you wish to use for the saved query,
answer set, or L-number list. The name must:

- 1. Begin with a letter,
- 2. Have 1-12 characters,
- 3. Contain only letters (A-Z) and numbers (0-9),
- 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
- 5. Not already be in use as a saved name,
- 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn10519102
 FINN10519102 IS NOT A VALID SAVED NAME
 Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:
 - 1. Begin with a letter,
 - 2. Have 1-12 characters,
 - 3. Contain only letters (A-Z) and numbers (0-9),
 - End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
 - 5. Not already be in use as a saved name,
 - 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn519102
 FINN519102 IS NOT A VALID SAVED NAME
 Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:
 - 1. Begin with a letter,
 - 2. Have 1-12 characters,
 - 3. Contain only letters (A-Z) and numbers (0-9),
 - 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
 - 5. Not already be in use as a saved name,
 - 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn519102/a 'FINN519102/A' IS NOT ALLOWED WITH ALL The saved name of an L# list must end with '/L'.
- => SAVE L1,L2,L3,L4 FINN10519102/L L# LIST L1,L2,L3,L4 HAS BEEN SAVED AS 'FINN10519102/L'
- => log off ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF LOGOFF? (Y)/N/HOLD:y STN INTERNATIONAL LOGOFF AT 17:55:43 ON 22 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptamrf1614

NEWS IPC8

```
Welcome to STN International
                 Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
NEWS
         JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
                 CA/CAplus updated with revised CAS roles
NEWS
         JAN 22
NEWS
      7
         JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS
      8
         JAN 29
                 PHAR reloaded with new search and display fields
NEWS 9
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
NEWS 10
         FEB 15
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 11
         FEB 15
                 RUSSIAPAT enhanced with pre-1994 records
NEWS 12
         FEB 23
                 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 13
         FEB 26
                 MEDLINE reloaded with enhancements
NEWS 14
         FEB 26 '
                 EMBASE enhanced with Clinical Trial Number field
         FEB 26
NEWS 15
                 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16
         FEB 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17
         FEB 26
                 CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
NEWS 18
         MAR 15
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19
         MAR 16
                 CASREACT coverage extended
NEWS 20 MAR 20
                 MARPAT now updated daily
NEWS 21 MAR 22
                 LWPI reloaded
NEWS 22 MAR 30
                 RDISCLOSURE reloaded with enhancements
NEWS 23 APR 02
                 JICST-EPLUS removed from database clusters and STN
NEWS 24 APR 30
                 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25 APR 30
                 CHEMCATS enhanced with 1.2 million new records
NEWS 26 APR 30
                 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27 APR 30
                 INPADOC replaced by INPADOCDB on STN
NEWS 28 MAY 01
                 New CAS web site launched
         80 YAM
NEWS 29
                 CA/CAplus Indian patent publication number format defined
                 RDISCLOSURE on STN Easy enhanced with new search and display.
NEWS 30
         MAY 14
                 fields
                 BIOSIS reloaded and enhanced with archival data
NEWS 31
         MAY 21
NEWS 32
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS 33
        MAY 21
                 CA/CAplus enhanced with additional kind codes for German
                 patents
         MAY 22
NEWS 34
                 CA/CAplus enhanced with IPC reclassification in Japanese
                 patents
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

For general information regarding STN implementation of IPC 8

FILE 'HOME' ENTERED AT 14:30:38 ON 30 MAY 2007

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 14:31:12 ON 30 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 MAY 2007 HIGHEST RN 936074-26-9 DICTIONARY FILE UPDATES: 29 MAY 2007 HIGHEST RN 936074-26-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> s mitiglinide

L1 2 MITIGLINIDE

--> d l1

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN

=> s 11

L2 2 MITIGLINIDE

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 13.20 13.41

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:33:11 ON 30 MAY 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing

```
of this information, without the prior written consent of CAS, is
strictly prohibited.
FILE COVERS 1907 - 30 May 2007 VOL 146 ISS 23
                                 (20070529/ED)
FILE LAST UPDATED: 29 May 2007
Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:
http://www.cas.org/infopolicy.html
=> s l1
L3
           129 L1
=> d 13 1-10 IBIB
L3 ANSWER 1 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 2 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 3 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 4 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 5 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 6 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 7 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 8 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 9 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
L3 ANSWER 10 OF 129 CAPLUS COPYRIGHT 2007 ACS on STN
=> d his
     (FILE 'HOME' ENTERED AT 14:30:38 ON 30 MAY 2007)
    FILE 'REGISTRY' ENTERED AT 14:31:12 ON 30 MAY 2007
L1
              2 S MITIGLINIDE
L2
              2 S L1
     FILE 'CAPLUS' ENTERED AT 14:33:11 ON 30 MAY 2007
L3
            129 S L1
=> e mitiglinide
E1
             1
                  MITIGEAGE/BI
E2
             1
                  MITIGEN/BI
```

91 --> MITIGLINIDE/BI

MITIGLNIDE/BI

E3

```
E5
                    MITIGRATION/BI
E6
                    MITIGTION/BI
E7
             2
                    MITII/BI
E8
             1
                   MITIKAS/BI
E9
             1
                   MITIKO/BI
E10
                    MITIKOGANE/BI
E11
                    MITILAN/BI
E12
              3
                   MITILANE/BI
=> s L3 or mitiglinide
            91 MITIGLINIDE
L4
           139 L3 OR MITIGLINIDE
=> s 4 and (diabetes or diabet or postprandial or diatbetic or glycemic or
complication or (glucose level))
OR IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> s 14 and (diabetes or diabet or postprandial or diabetic or glycemic or
complication or (glucose level))
OR IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> s 14 and (diabetic or diabetes or postprandial or glycemic or complication or
glucose)
         65527 DIABETIC
          9096 DIABETICS
         69552 DIABETIC
                  (DIABETIC OR DIABETICS)
        125400 DIABETES
          7888 POSTPRANDIAL
             1 POSTPRANDIALS
          7888 POSTPRANDIAL
                  (POSTPRANDIAL OR POSTPRANDIALS)
          6137 GLYCEMIC
         12238 COMPLICATION
         35176 COMPLICATIONS
         44391 COMPLICATION
                  (COMPLICATION OR COMPLICATIONS)
        423650 GLUCOSE
           823 GLUCOSES
        423830 GLUCOSE
                  (GLUCOSE OR GLUCOSES)
L5
            91 L4 AND (DIABETIC OR DIABETES OR POSTPRANDIAL OR GLYCEMIC OR
               COMPLICATION OR GLUCOSE)
=> save
ENTER L#, L# RANGE, ALL, OR (END):all
ENTER NAME OR (END):10519155
10519155 IS NOT A VALID SAVED NAME
Enter the name you wish to use for the saved query,
answer set, or L-number list. The name must:
  1. Begin with a letter,
  2. Have 1-12 characters,
  3. Contain only letters (A-Z) and numbers (0-9),

    End with /Q for a query (search profile,

     structure, or screen set), /A for an answer
```

set, or /L for an L-number list.
5. Not already be in use as a saved name,

- 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn053007 FINN053007 IS NOT A VALID SAVED NAME Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:
 - Begin with a letter.
 - 2. Have 1-12 characters,
 - 3. Contain only letters (A-Z) and numbers (0-9),
 - End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
 - 5. Not already be in use as a saved name,
 - 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn5307

FINN5307 IS NOT A VALID SAVED NAME

Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:

- 1. Begin with a letter,
- 2. Have 1-12 characters,
- 3. Contain only letters (A-Z) and numbers (0-9),
- 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
- 5. Not already be in use as a saved name,
- 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn530 FINN530 IS NOT A VALID SAVED NAME Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:
 - 1. Begin with a letter,
 - 2. Have 1-12 characters,
 - 3. Contain only letters (A-Z) and numbers (0-9),
 - 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
 - 5. Not already be in use as a saved name,
 - 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn5

FINNS IS NOT A VALID SAVED NAME

Enter the name you wish to use for the saved query, answer set, or L-number list. The name must:

- 1. Begin with a letter,
- 2. Have 1-12 characters,
- 3. Contain only letters (A-Z) and numbers (0-9),
- 4. End with /Q for a query (search profile, structure, or screen set), /A for an answer set, or /L for an L-number list.
- 5. Not already be in use as a saved name,
- 6. Not be END, SAV, SAVE, SAVED
- 7. Not have the form of an L-number (Lnnn). ENTER NAME OR (END):finn053007/a 'FINN053007/A' IS NOT ALLOWED WITH ALL

The saved name of an L# list must end with '/L'.

=> finn053007/1

FINN053007 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST

31.98

45.39

FILE 'STNGUIDE' ENTERED AT 14:40:55 ON 30 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: May 25, 2007 (20070525/UP).

=> SAVE L1,L2,L3,L4,L5 FINN053007/L L# LIST L1,L2,L3,L4,L5 HAS BEEN SAVED AS 'FINN053007/L'

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 0.06

SESSION 45.45

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 14:41:35 ON 30 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptamrf1614

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * * SESSION RESUMED IN FILE 'STNGUIDE' AT 14:46:39 ON 30 MAY 2007 FILE 'STNGUIDE' ENTERED AT 14:46:39 ON 30 MAY 2007 COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 0.06 SESSION 45.45

=> dis his

(FILE 'HOME' ENTERED AT 14:30:38 ON 30 MAY 2007)

FILE 'REGISTRY' ENTERED AT 14:31:12 ON 30 MAY 2007

L1 2 S MITIGLINIDE

L2 2 S L1

FILE 'CAPLUS' ENTERED AT 14:33:11 ON 30 MAY 2007

L3 129 S L1

E MITIGLINIDE

L4 139 S L3 OR MITIGLINIDE

L5 91 S L4 AND (DIABETIC OR DIABETES OR POSTPRANDIAL OR GLYCEMIC OR C

FILE 'STNGUIDE' ENTERED AT 14:40:55 ON 30 MAY 2007 SAVE L1,L2,L3,L4,L5 FINN053007/L

=> s 15 and diabetes

0 MITIGLINIDE

- 0 MITIGLINIDE
- O DIABETIC
- 1 DIABETES
- 0 POSTPRANDIAL
- 0 GLYCEMIC
- 0 COMPLICATION
- 0 GLUCOSE

L6

- 1 DIABETES
- 0 L5 AND DIABETES

=> d 15 1-91 ibib YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:Y

- L5 ANSWER 1 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 2 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 3 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 4 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 5 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 6 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 7 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 8 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 9 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 10 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 11 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 12 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 13 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 14 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 15 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 16 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN

L5 ANSWER 17 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 18 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 19 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 20 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 21 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 22 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 23 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 24 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 25 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 26 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 27 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 28 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 29 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 30 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 31 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 32 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 33 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 34 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 35 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 36 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 37 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN

L5 ANSWER 38 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 39 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 40 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 41 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 42 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 43 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 44 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 45 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 46 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 47 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 48 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 49 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 50 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 51 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 52 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 53 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 54 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 55 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 56 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 57 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 58 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN

L5 ANSWER 59 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 60 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 61 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 62 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 63 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 64 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 65 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 66 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 67 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 68 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 69 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 70 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN "L5 ANSWER 71 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 72 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 73 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 74 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 75 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 76 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 77 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 78 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN L5 ANSWER 79 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN

- L5 ANSWER 80 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 81 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 82 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 83 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 84 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 85 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 86 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 87 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 88 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 89 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 90 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN
- L5 ANSWER 91 OF 91 CAPLUS COPYRIGHT 2007 ACS on STN

=> log hold COST IN U.S. DOLLARS

SINCE FILE SESSION ENTRY

FULL ESTIMATED COST

153.54 0.06

TOTAL

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 14:48:59 ON 30 MAY 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssptamrf1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

Welcome to STN International

NEWS Web Page for STN Seminar Schedule - N. America

NEWS JAN 08 CHEMLIST enhanced with New Zealand Inventory of Chemicals

JAN 16 NEWS CA/CAplus Company Name Thesaurus enhanced and reloaded

```
NEWS
                 IPC version 2007.01 thesaurus available on STN
         JAN 16
NEWS
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS
         JAN 22
                 CA/CAplus updated with revised CAS roles
      6
NEWS
      7
         JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS
         JAN 29
      8
                  PHAR reloaded with new search and display fields
NEWS
      9
         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
NEWS 10
                 PATDPASPC enhanced with Drug Approval numbers
         FEB 15
NEWS 11
                 RUSSIAPAT enhanced with pre-1994 records
         FEB 15
NEWS 12
                 KOREAPAT enhanced with IPC 8 features and functionality
         FEB 23
NEWS 13
         FEB 26
                 MEDLINE reloaded with enhancements
NEWS 14
         FEB 26
                 EMBASE enhanced with Clinical Trial Number field
NEWS 15
         FEB 26
                 TOXCENTER enhanced with reloaded MEDLINE
NEWS 16
         FEB 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17
         FEB 26
                 CAS Registry Number crossover limit increased from 10.000
                 to 300,000 in multiple databases
NEWS 18
         MAR 15
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19
                 CASREACT coverage extended
         MAR 16
                 MARPAT now updated daily
NEWS 20
         MAR 20
NEWS 21
         MAR 22
                 LWPI reloaded
NEWS 22
                 RDISCLOSURE reloaded with enhancements
         MAR 30
NEWS 23
                 JICST-EPLUS removed from database clusters and STN
         APR 02
NEWS 24
         APR 30 GENBANK reloaded and enhanced with Genome Project ID field
NEWS 25
         APR 30
                 CHEMCATS enhanced with 1.2 million new records
NEWS 26
         APR 30
                 CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 27
         APR 30
                 INPADOC replaced by INPADOCDB on STN
NEWS 28
         MAY 01
                 New CAS web site launched
NEWS 29
         MAY 08
                 CA/CAplus Indian patent publication number format defined
NEWS 30
         MAY 14
                 RDISCLOSURE on STN Easy enhanced with new search and display
                 fields
         MAY 21
NEWS 31
                 BIOSIS reloaded and enhanced with archival data
NEWS 32
         MAY 21
                 TOXCENTER enhanced with BIOSIS reload
NEWS 33
         MAY 21
                 CA/CAplus enhanced with additional kind codes for German
                 patents
         MAY 22
                 CA/CAplus enhanced with IPC reclassification in Japanese
```

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 17:53:06 ON 06 JUN 2007

patents

=> activate

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of

commands which can be used in this file.

=> activate saved
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> d his

(FILE 'HOME' ENTERED AT 17:53:06 ON 06 JUN 2007)

=> saved
SAVED IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> activate 102/A
THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE
Some commands only work in certain files. For example, the EXPAND
command can only be used to look at the index in a file which has an
index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of
commands which can be used in this file.

=> log off
ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 17:54:19 ON 06 JUN 2007

***** QUERY RESULTS *****

=> d his 133

```
(FILE 'HCAPLUS' ENTERED AT 14:40:20 ON 24 MAY 2007)
L33
            24 S L32 OR L24
=> d que 133
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 145375-43-5/RN
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 207844-01-7/RN
L5
             1 SEA FILE=REGISTRY ABB=ON PLU=ON MITIGLINIDE/CN
L6
             2 SEA FILE=REGISTRY ABB=ON PLU=ON (L4 OR L5 OR L6)
L8
L9
            97 SEA FILE-HCAPLUS ABB-ON PLU-ON L8 OR MITIGLINIDE CALCIUM
               HYDRATE/OBI
L10
            87 SEA FILE=HCAPLUS ABB=ON PLU=ON MITIGLINIDE/OBI OR MITI/OBI(W)
               GLINIDE/OBI
L11
            108 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10
L13
       2160940 SEA FILE=HCAPLUS ABB=ON PLU=ON (INHIBIT?/OBI OR HINDER?/OBI
               OR IMPED?/OBI OR REDUC?/OBI OR REDN#/OBI OR SUPPRESS?/OBI OR
               PREVENT?/OBI OR BLOCK?/OBI OR ELIMINAT?/OBI)
L19
        110617 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABET?/OBI
            54 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L19
L20
            28 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 (5A) L20
L22
               QUE ABB=ON PLU=ON AY<2004 OR PRY<2004 OR PY<2004 OR MY
L23
               <2004 OR REVIEW/DT
           17 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L23
L24
           271 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI (3A)
               (POST/OBI(W) PRANDIAL/OBI OR POSTPRANDIAL/OBI)
             3 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L27
L28
         13237 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI
L29
         13237 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 OR L29
L30
             7 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L30
L31
L32
             7 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 OR L31
           24 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L24
L33
=> d his 149
     (FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 14:54:53 ON 24 MAY 2007)
L49
            33 S L48 (P) L13
=> d que 149
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 145375-43-5/RN
L4
L5
             1 SEA FILE=REGISTRY ABB=ON PLU=ON 207844-01-7/RN
L6
             1 SEA FILE=REGISTRY ABB=ON PLU=ON MITIGLINIDE/CN
L8
             2 SEA FILE=REGISTRY ABB=ON PLU=ON (L4 OR L5 OR L6)
            87 SEA FILE=HCAPLUS ABB=ON PLU=ON MITIGLINIDE/OBI OR MITI/OBI(W)
L10
               GLINIDE/OBI
       2160940 SEA FILE=HCAPLUS ABB=ON PLU=ON (INHIBIT?/OBI OR HINDER?/OBI
L13
               OR IMPED?/OBI OR REDUC?/OBI OR REDN#/OBI OR SUPPRESS?/OBI OR
               PREVENT?/OBI OR BLOCK?/OBI OR ELIMINAT?/OBI)
L19
         110617 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABET?/OBI
L23
               QUE ABB=ON PLU=ON AY<2004 OR PRY<2004 OR PY<2004 OR MY
               <2004 OR REVIEW/DT
L27
           271 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI (3A)
                (POST/OBI(W) PRANDIAL/OBI OR POSTPRANDIAL/OBI)
L29
         13237 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI
L43
            84 SEA L8
           172 SEA L10
L44
```

L45 10 SEA MITIGLINIDE CALCIUM HYDRATE L46 173 SEA (L43 OR L44 OR L45) L47 110 SEA L46 AND (L19 OR L27 OR L29) L48 46 SEA L47 AND L23 L49 33 SEA L48 (P) L13

=> dup rem 133 149

FILE 'HCAPLUS' ENTERED AT 15:07:58 ON 24 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 15:07:58 ON 24 MAY 2007

FILE 'BIOSIS' ENTERED AT 15:07:58 ON 24 MAY 2007 Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 15:07:58 ON 24 MAY 2007 Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'DRUGU' ENTERED AT 15:07:58 ON 24 MAY 2007 COPYRIGHT (C) 2007 THE THOMSON CORPORATION PROCESSING COMPLETED FOR L33 PROCESSING COMPLETED FOR L49

L61 49 DUP REM L33 L49 (8 DUPLICATES REMOVED)

ANSWERS '1-24' FROM FILE HCAPLUS ANSWERS '25-42' FROM FILE MEDLINE ANSWERS '43-45' FROM FILE EMBASE ANSWERS '46-49' FROM FILE DRUGU

=> d l61 1-24 ibib ed abs hitind

L61 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:505268 HCAPLUS Full-text DOCUMENT NUMBER: 145:483552

TITLE: Therapeutic efficacy of mitiglinide combined

with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine in patients with type 2 diabetes mellitus Yoshihara, Tomoaki; Kumashiro, Naoki; Kanazawa,

AUTHOR(S): Yoshihara, Tomoaki; Kumashiro, Naoki; Kanazawa, Yoshie; Mita, Tomoya; Sakurai, Yuko; Kawai, Junko;

Abe, Michiko; Motojima, Kayoko; Hara, Kanako;

Abe, Michiko; Motojima, Kayoko; Hara, Kanako; Yamazaki, Yuka; Kanazawa, Akio; Miwa, Shinya; Sato,

Fumihiko; Kanno, Rei; Shimizu, Tomoaki; Sakai, Ken; Uchino, Hiroshi; Watada, Hirotaka; Tanaka, Yasushi;

Kawamori, Ryuzo; Hirose, Takahisa

CORPORATE SOURCE: Department of Medicine, Metabolism and Endocrinology,

School of Medicine, Juntendo University, Bunkyo-ku,

Tokyo, 113-8421, Japan

SOURCE: Endocrine Journal (Kyoto, Japan) (2006), 53(1), 67-72

CODEN: ENJOEO; ISSN: 0918-8959

PUBLISHER: Japan Endocrine Society

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 31 May 2006

AB Mitiglinide is novel class of rapid-acting insulin secretagogues, which have been widely used alone or in combination with other oral hypoglycemic drugs to improve postprandial hyperglycemia in early type 2 diabetes. While mitiglinide enhances postprandial requirement of insulin, the efficacy of mitiglinide

combined with insulin has yet to be established. We investigated the efficacy of mitiglinide combined with insulin glargine, the first soluble insulin analog that has a flat and prolonged effect. After control with the intensive regimen (daily aspart insulin and glargine), 30 inpatients with type 2 diabetes were switched to premeal mitiglinide combined with once daily insulin glargine (mitiglinide regimen), and daily profiles of blood glucose level were compared under each regimen. Fifteen patients showed similar control of hyperglycemia with mitiglinide regimen and intensive insulin regimen, assessed by M value (<32), while the remaining 15 showed worsening under the mitiglinide regimen. The patients who were well controlled with mitiglinide regimen were significantly younger (51.9 \pm 16.0 years, p<0.005) and heavier (body mass index: 25.7 \pm 3.3 kg/m2, p<0.05) than those who were not (67.9 \pm 8.7 and 23.0 \pm 3.1, resp.). Moreover, insulin doses of aspart per body weight were significantly fewer in effective group than in ineffective group. Duration of diabetes was shorter in the effective group, albeit insignificantly. Previous treatment before starting intensive insulin regimen, such as insulin and sulfonylurea, was not different between the two groups. Our results suggest that mitiglinide plus insulin glargine combination therapy is useful for lowering both fasting and postprandial hyperglycemia in a subpopulation of type 2 diabetes. The long-term effects of such treatment need to be established in future studies.

CC 1-10 (Pharmacology)

ST mitiglinide insulin glargine hyperglycemia type2 diabetes mellitus antidiabetic

IT Antidiabetic agents

Body weight

Combination chemotherapy

Human

Hyperglycemia

(mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial

hyperglycemia in patient with type 2 diabetes mellitus)

IT Glycerides, biological studies

High-density lipoproteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial

hyperglycemia in patient with type 2 diabetes mellitus)

IT Diabetes mellitus

(non-insulin-dependent; mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial hyperglycemia in patient with type 2 diabetes mellitus)

IT 50-99-7, D-Glucose, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial hyperglycemia in patient with type 2 diabetes mellitus)

IT 57-88-5, Cholesterol, biological studies 62572-11-6, Hemoglobin Alc RL: BSU (Biological study, unclassified); BIOL (Biological study) (mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial hyperglycemia in patient with type 2 diabetes mellitus)

IT 9004-10-8, Insulin, biological studies 145375-43-5,

Mitiglinide 160337-95-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(mitiglinide combined with once daily insulin glargine after switching from multiple daily insulin regimen of aspart insulin and glargine lowered both fasting and postprandial

hyperglycemia in patient with type 2 diabetes mellitus)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:962511 HCAPLUS Full-text

DOCUMENT NUMBER: 143:244659

TITLE: Method for examining blood glucose control state
INVENTOR(S): Kitahara, Yoshiro; Miura, Kyoko; Takeuchi, Masayoshi

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.			KIND DATE			APPLICATION NO.						D	ATE		
						-									-		
WO	2005	0809	93		. A1		2005	0901	1	WO 2	005-	JP34	38		2	0050	223
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚŻ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											

PRIORITY APPLN. INFO.:

JP 2004-47020 A 20040223

ED Entered STN: 02 Sep 2005

- AB A novel diagnostic marker for a blood glucose control state is provided. Also provided is a method for diagnosing or examining a blood glucose control state. The method comprises a process for measuring the AGE2 concentration in a blood or body fluid sample of a patient by a measuring method selected from a Western blotting method, an enzyme immunoassay, a RIA, a liquid chromatog. and a dot blot method, and a process for evaluating the state of postprandial hyperglycemia control.
- IC' ICM G01N033-68

ICS G01N033-15; G01N033-50; G01N033-53; G01N033-577; G01N033-66

CC 9-10 (Biochemical Methods)

Section cross-reference(s): 14

IT Hyperglycemia

(postprandial; method for examining blood glucose control state by measuring blood AGE2)

IT 54870-28-9D, Meglitinide, derivative 105816-04-4, Nateglinide 135062-02-1, Repaglinide 145375-43-5, Mitiglinide

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method for examining blood glucose control state by measuring blood AGE2)
REFERENCE COUNT:
3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:120729 HCAPLUS Full-text

DOCUMENT NUMBER: 142:219276

TITLE: Preparation of 5-substituted 2H-pyrazole-3-carboxylic

acid derivatives as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and

related diseases

INVENTOR(S): Semple, Graeme; Gharbaoui, Tawfik; Shin, Young-Jun;

Decaire, Marc; Averbuj, Claudia; Skinner, Philip J.

PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE					APPLICATION NO.					ATE	
						-	- -								-		
WO	2005	0116	77		A1		2005	0210	1	WO 2	004-1	US18:	389		2	0040	510 <
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	•	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	ŲΝ,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
AU	2004	2606	36		A1		2005	0210		AU 2	004-	2606	36		2	0040	510 <
CA	2528	834			A1		2005	0210	(CA 2	004-	2528	834		2	0040	510 <
EP	1633	351			A1		2006	0315		EP 2	004-	7764	18		2	0040	510 <
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK				
US	2007	0325	37		A1		2007	0208	1	US 2	006-	5603	32		2	0060	908 <
PRIORIT	Y APP	LN.	INFO	.:		•			1	US 2	003-4	4786	64P	:	P 20	0030	513 <
									1	WO 2	004-1	US18:	389	1	W 2	0040	510
		1-1															

OTHER SOURCE(S): MARPAT 142:219276

ED Entered STN: 11 Feb 2005

GI

$$z_{Y_m x w_n}$$
 R^1
 $Co_2 R^2$

AB Title compds. [I; W, Y = (substituted) alkylene, alkenylene, alkynylene; X = NR3CO, NR3SO2, NR3, CO, CH(OH), C(NH), O, S, SO, SO2, etc.; R3, R4 = H, (substituted) alkyl, Ph, heteroaryl; Z = H, halo, (substituted) Ph, heteroaryl; R1 = H, OH, halo, alkyl, haloalkyl; R2 = H, alkyl; m, n = 0, 1; with provisos], were prepared Thus, 5-methylthiomethyl-2H-pyrazole-3-carboxylic acid (preparation outlined) showed hRUP25 agonist activity with EC50 = 4.3 μM.

- 10/519155 IC ICM A61K031-415 ICS C07D231-14; A61P003-06 CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1, 63 pyrazolecarboxylate prepn RUP25 nicotinic acid receptor agonist; ST dyslipidemia atherosclerosis heart disease diabetes obesity treatment pyrazolecarboxylate prepn Diabetes mellitus IT (non-insulin-dependent, treatment; preparation of pyrazolecarboxylates as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases) 64-77-7, Tolbutamide IT 94-20-2, Chlorpropamide 114-86-3, Phenformin 339-43-5, Carbutamide 339-44-6, Glymidine 451-71-8, Glyhexamide 535-65-9, Glybuthiazole 631-27-6, Glyclopyramide 637-07-0, Clofibrate 657-24-9, Metformin 664-95-9, Tolcyclamide 692-13-7, Buformin 882-09-7, Clofibric acid 968-81-0, Acetohexamide 1156-19-0, Tolazamide 1228-19-9, Glypinamide 1492-02-0, Glybuzole 3149-00-6, Phenbutamide 3459-20-9, Glymidine 4618-41-1, 1-Butyl-3-metanilylurea 10238-21-8, Glibenclamide 14929-11-4, Simfibrate 21187-98-4, Gliclazide 25046-79-1, Glisoxepid 25812-30-0, Gemfibrozil 26944-48-9, 30299-08-2, Clinofibrate Glibornuride 29094-61-9, Glipizide 31637-97-5, Etofibrate 31980-29-7, Nicofibrate 33342-05-1, Gliquidone 42597-57-9, Ronifibrate, biological studies 41859-67-0, Bezafibrate 49562-28-9, Fenofibrate 52214-84-3, Ciprofibrate 54504-70-0, Theofibrate 55285-45-5, Pirifibrate 55937-99-0, Beclobrate 56180-94-0, Acarbose 62571-86-2, Captopril 68367-52-2, Sorbinil 69047-39-8, Binifibrate 72432-03-2, Miglitol 74258-86-9, Alacepril 75330-75-5, Lovastatin 75847-73-3, Enalapril 76420-72-9, Enalaprilat 76547-98-3, Lisinopril 79902-63-9, Simvastatin 81093-37-0, Pravastatin 82159-09-9, Epalrestat 82834-16-0, Perindopril 82964-04-3, Tolrestat 83435-66-9, Delapril 83480-29-9, Voglibose 83647-97-6, Spirapril 85441-61-8, Quinapril 85856-54-8, Moveltipril 86541-75-5, Benazepril 88768-40-5, Cilazapril 87333-19-5, Ramipril 87679-37-6, Trandolapril 89371-37-9, Imidapril 89391-50-4, Imirestat 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 98048-97-6, Fosinopril 105816-04-4, Nateglinide 110703-94-1, Zopolrestat 111025-46-8, Pioglitazone 111223-26-8, Ceronapril 111902-57-9, Temocapril 112733-06-9, 122320-73-4, Rosiglitazone 134523-00-5, Atorvastatin 145375-43-5, Mitiglinide 145599-86-6, Cerivastatin 287714-41-4, Rosuvastatin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases)
 - (coadministration; preparation of pyrazolecarboxylates as agonists for the
- 9001-42-7, α -Glucosidase TT 9028-31-3, Aldose reductase 9028-35-7, Hmg coa reductase
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors coadministration; preparation of pyrazolecarboxylates as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases)
- TT 9015-82-1
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors, coadministration; preparation of pyrazolecarboxylates as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases)
- IT 111-02-4, Squalene
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (synthesis inhibitors coadministration; preparation of pyrazolecarboxylates as agonists for the RUP25 nicotinic acid receptor for the treatment of dyslipidemia and related diseases)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1009580 HCAPLUS Full-text

DOCUMENT NUMBER: 144:142642

TITLE: Effects of S21403 (mitiglinide) on

postprandial generation of oxidative stress and

inflammation in type 2 diabetic patients

AUTHOR(S): Assaloni, R.; Ros, R. Da; Quagliaro, L.; Piconi, L.;

Maier, A.; Zuodar, G.; Motz, E.; Ceriello, A.

CORPORATE SOURCE: Department of Pathology and Medicine, Experimental and

Clinical, University of Udine, Udine, Italy

SOURCE: Diabetologia (2005), 48(9), 1919-1924

CODEN: DBTGAJ; ISSN: 0012-186X

PUBLISHER: Springer GmbH

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 19 Sep 2005

Aim/hypothesis: Evidence suggests that postprandial hyperglycemia may be a AB cardiovascular risk factor in diabetes. Oxidative stress and inflammation are involved in the pathogenesis of diabetic complications and previous studies have shown increased oxidative stress and inflammation in the postprandial phase in diabetic patients. The aim of the present study was to evaluate whether controlling postprandial hyperglycemia with S21403 (mitiglinide) is accompanied by a reduced generation of oxidative stress and inflammation. Subjects and methods: Forty type 2 diabetic patients participated in the study. Two different breakfast-tests were performed in each patient, with placebo or S21403. Plasma nitrotyrosine, plasma malondialdehyde (MDA), oxidized LDL (oxLDL), plasma total radical-trapping antioxidant parameter (TRAP), IL-6, IL-18, TNF- α , plasma glucose and insulin were measured. Results: After the administration of S21403, 40 mg, a rapid stimulation of insulin secretion was observed, accompanied by a reduction of postprandial hyperglycemia. With S21403, a significant decrease of either nitrotyrosine, MDA and oxLDL levels, and a preservation of plasma TRAP compared with placebo was found. Significant decreases of IL-6, IL-18 and TNF- α were also observed with S21403 compared with placebo. Conclusions/interpretation: This study shows that controlling postprandial hyperglycemia with S21403 significantly improves the cluster of oxidative stress and inflammation markers that are increased in the postprandial state in diabetic patients.

CC 1-10 (Pharmacology)

ST mitiglinide postprandial hyperglycemia

oxidative stress inflammation diabetes antidiabetic

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SSR (signal sequence receptor); controlling postprandial
hyperglycemia with S21403 significantly decreased oxidative
stress markers nitrotyrosine, MDA, oxLDL levels and preserved plasma
TRAP in type 2 diabetic patient)

IT Interleukin 18

RL: BSU (Biological study, unclassified); BIOL (Biological study) (controlling postprandial hyperglycemia with S21403 significantly decreased inflammatory marker interleukin-18 in type 2 diabetic patient)

IT Interleukin 6

RL: BSU (Biological study, unclassified); BIOL (Biological study) (controlling postprandial hyperglycemia with S21403 significantly decreased inflammatory marker interleukin-6 in type 2 diabetic patient)

IT Tumor necrosis factors

```
RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (controlling postprandial hyperglycemia with S21403
        significantly decreased inflammatory marker tumor necrosis
        factor-\alpha in type 2 diabetic patient)
TΤ
    Inflammation
        (controlling postprandial hyperglycemia with S21403
        significantly decreased inflammatory markers IL-6, IL-18, TNF-\alpha
        in type 2 diabetic patient)
IT
    Human
       Hyperglycemia
     Pancreas
        (controlling postprandial hyperglycemia with S21403
        significantly decreased oxidative stress markers nitrotyrosine, MDA,
        oxLDL levels, inflammatory markers IL-6, IL-18, TNF-\alpha and
        preserved plasma TRAP in type 2 diabetic patient)
TТ
    Oxidative stress, biological
        (controlling postprandial hyperglycemia with S21403
        significantly decreased oxidative stress markers nitrotyrosine,
        malondialdehyde, oxLDL levels and preserved plasma TRAP in type 2
        diabetic patient)
    Antidiabetic agents
IT
        (controlling postprandial hyperglycemia with
       mitiglinide significantly decreased oxidative stress markers
        nitrotyrosine, MDA, oxLDL levels, inflammatory markers IL-6, IL-18,
        TNF-\alpha and preserved plasma TRAP in type 2 diabetic patient)
IT
    Diabetes mellitus
        (non-insulin-dependent; controlling postprandial
        hyperglycemia with S21403 significantly decreased oxidative
        stress markers nitrotyrosine, MDA, oxLDL levels, inflammatory markers
        IL-6, IL-18, TNF-\alpha and preserved plasma TRAP in type 2 diabetic
        patient)
IT
    Low-density lipoproteins
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (oxidized; controlling postprandial hyperglycemia
        with S21403 significantly decreased oxidative stress marker oxLDL
        levels in type 2 diabetic patient)
     50-99-7, Glucose, biological studies
                                            9004-10-8, Insulin, biological
IT
     studies
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (S21403 stimulated insulin secretion which was accompanied by reduction of
       postprandial hyperglycemia in type 2 diabetic
       patient)
     542-78-9, Malondialdehyde
TТ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (controlling postprandial hyperglycemia with S21403
        significantly decreased oxidative stress marker malondialdehyde in type
        2 diabetic patient)
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (controlling postprandial hyperglycemia with S21403
        significantly decreased oxidative stress marker nitrotyrosine in type 2
        diabetic patient)
     145375-43-5, Mitiglinide
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (controlling postprandial hyperglycemia with
        mitiglinide significantly decreased oxidative stress markers
        nitrotyrosine, MDA, oxLDL levels, inflammatory markers IL-6, IL-18,
        TNF-\alpha and preserved plasma TRAP in type 2 diabetic patient)
```

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:902180 HCAPLUS Full-text

DOCUMENT NUMBER: 141:355415

TITLE: A synergistic pharmaceutical combination comprising

cicletanine for the prevention or treatment

of diabetes

INVENTOR(S): Egri, Janos

PATENT ASSIGNEE(S): Synosens Kutato es Fejleszto Kft., Hung.

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIND DATE			APPLICATION NO.						D	ATE	
					A1	_									2	00404	114 <
	W:						AU,									•	
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	ΦM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	ŖU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,
		TD,	TG														
HU	2003	0099	0		A2		2005	0530]	HU 2	003-	990			2	00304	115 <
CA	2522	126			A1		2004	1028	(CA 20	004-	2522	126		2	00404	114 <
EP	1648	453			A1		2006	0426		EP 20	004-	7273	31		2	0404	114 <
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	ΗU,	PL,	SK				
JP	2006	5236	68		T		2006	1019	,	JP 20	006-	50624	48		2	0404	114 <
PRIORIT	ORITY APPLN. INFO.:								HU 2003-990					1	A 2	00304	115 <
	·								1	WO 2	004-1	HU37		1	W 2	00404	114

OTHER SOURCE(S): MARPAT 141:355415

ED Entered STN: 28 Oct 2004

- AB The invention refers to a synergistic pharmaceutical combination comprising (a) a first pharmaceutical composition containing cicletanine or a pharmaceutically suitable acid addition salt thereof and one or more conventional carrier(s), and (b) a second pharmaceutical composition containing an antidiabetic or antihyperlipidemic active agent or, if desired and chemical possible, a pharmaceutically suitable acid addition salt or a salt formed with a pharmaceutically suitable base thereof and one or more conventional carrier(s). An antidiabetic agent is selected from a thiazolidinedione derivative, a sulfonylurea, or a biguanidine derivative. The pharmaceutical combination is suitable for the prevention or treatment of a prediabetic state, metabolic X-syndrome or diabetes mellitus, as well as disorders associated with these states.
- IC ICM A61K031-4355

ICS A61K031-155; A61K031-427; A61K031-64; A61P003-00; A61P003-10

- CC 63-6 (Pharmaceuticals)
 - Section cross-reference(s): 1, 2
- ST cicletanine antidiabetic hypolipemic synergy diabetes complication

ΙT Hair, disease (diffuse effluvium; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) IT Metabolic disorders (metabolic syndrome X; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related IT Antidiabetic agents (oral; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) Ovary, disease IT (polycystic; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) ΙT Alopecia Antidiabetic agents Combination chemotherapy Diabetes mellitus Hypolipemic agents (synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) IT Dyslipidemia RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) Sulfonylureas IT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) IT Drug interactions (synergistic; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) 10238-21-8, Glyburide IT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Glibenclamide; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) IT 9004-10-8, Insulin, biological studies RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (resistance; synergistic combination comprising cicletanine for prevention or treatment of diabetes and related disorders) TΤ 64-77-7, Tolbutamide 94-20-2, Chloropropamide 114-86-3, Phenformin 637-07-0, Clofibrate 657-24-9, Metformin 631-27-6, Glyclopyramide 968-81-0, Acetohexamide 1156-19-0, Tolazamide 692-13-7, Buformin 1492-02-0, Glybuzole 2295-31-0D, Thiazolidinedione, derivs. 6882-47-9D, Biguanidine, derivs. 10571-59-2, Nicoclonate Niceritrol 11041-12-6, Cholestyramine 14929-11-4, Simfibrate 21187-98-4, Gliclazide 24477-37-0, Glisolamide 25046-79-1, Glisoxepid 25812-30-0, Gemfibrozil 26944-48-9, Glibornuride 27959-26-8, Nicomol 32797-92-5, Glisentide 29094-61-9, Glipizide 31637-97-5, Etofibrate 33342-05-1, Gliquidone 42597-57-9, Ronifibrate, biological studies 50925-79-6, Colestipol 51037-30-0, Acipimox 52214-84-3, Ciprofibrate 56180-94-0, Acarbose 56227-39-5, Polidexide 72432-03-2, Miglitol

81093-37-0, Pravastatin 82747-56-6, Cicletanine hydrochloride

79902-63-9, Simvastatin

74772-77-3, Ciglitazone 75330-75-5, Lovastatin

83480-29-9, Voglibose 89943-82-8, Cicletanine 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 97322-87-7, Troglitazone 105816-04-4, Senaglinide 111025-46-8, Pioglitazone 122320-73-4, Rosiglitazone 134523-00-5, Atorvastatin 135062-02-1, Repaglinide 145375-43-5, Mitiglinide

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synergistic combination comprising cicletanine for prevention

or treatment of diabetes and related disorders)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:681582 HCAPLUS Full-text

DOCUMENT NUMBER:

141:185111

TITLE:

Remedy for diabetes

INVENTOR(S):

Ikenoue, Takao; Kageyama, Yoko; Iino, Yukio; Kondo,

Nobuo

PATENT ASSIGNEE(S):

Ajinomoto Co., Inc., Japan

SOURCE:

PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

		DATE
WO 2004069259 A1 20040819 WO 2004-JF	1279	20040206 <
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, B	R, BW, BY,	BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, E	E, EG, ES,	FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, K	E, KG, KP,	KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, M	N, MW, MX,	MZ, NA, NI
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T	Z, UG, ZM,	ZW, AT, BE,
BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, G	B, GR, HU,	IE, IT, LU,
MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, C	F, CG, CI,	CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG		
AU 2004210268 A1 20040819 AU 2004-21	0268	20040206 <
CA 2515294 A1 20040819 CA 2004-25	15294	20040206 <
EP 1595544 A1 20051116 EP 2004-70	8897	20040206 <
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, L	I, LU, NL,	SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, E	G, CZ, EE,	HU, SK
BR 2004007303 A 20060207 BR 2004-73	03	20040206 <
CN 1771040 A 20060510 CN 2004-80	009410	20040206 <
US 2005272641 A1 20051208 US 2005-19	8511	20050808 <
PRIORITY APPLN. INFO.: JP 2003-31	088	A 20030207 <
WO 2004-JF	1279	A 20040206

OTHER SOURCE(S): MARPAT 141:185111

ED Entered STN: 20 Aug 2004

GI

```
AB
     A preventive and/or a remedy for diabetes, diabetic complications,
     hyperinsulinemia, sugar metabolic error or obesity characterized by comprising
     a combination of a compound represented by the following formula (I; Markush's
     structures given), its analog or a pharmaceutically acceptable salt thereof
     with a hypoglycemic agent.
IC
     ICM
          A61K031-5517
     ICS
          A61K031-551; A61K031-553; A61K031-554; A61P003-04; A61P003-10;
          A61P043-00; A61K045-00; C07D487-04
CC
     1-10 (Pharmacology)
     Section cross-reference(s): 2
IT
     Nerve, disease
        (diabetic neuropathy; heterocyclic compds. as antidiabetic
        and antiobesity agents)
IT
     Antidiabetic agents
     Antihypertensives
     Antiobesity agents
     Antioxidants
       Diabetes mellitus
     Drug resistance
     Obesity
     β3-Adrenoceptor agonists
        (heterocyclic compds. as antidiabetic and antiobesity agents)
                                     114-86-3, Fenformin
IT
     56-03-1D, Biguanide, derivs.
                                                           657-24-9, Metformin
     692-13-7, Buformin
                          10238-21-8, Glibenclamide
                                                       21187-98-4, Gliclazide
                             105816-04-4, Nateglinide
                                                        111025-46-8,
     56180-94-0, Acarbose
     Pioglitazone
                    122320-73-4, Rosiglitazone 145375-43-5,
     Mitiglinide
                                  433729-79-4
                   433729-78-3
                                                433729-80-7
     433729-81-8
                   433729-82-9
                                  433729-83-0
                                                433729-84-1
                                                               433729-85-2
     433729-86-3
                   433729-87-4
                                  433729-88-5
                                                433729-89-6
                                                               433729-90-9
     433729-91-0
                   433729-92-1
                                  433729-93-2
                                                433729-94-3
                                                               433729-95-4
     433729-96-5
                   433729-97-6
                                  433729-98-7
                                                433729-99-8
                                                               433730-00-8
     433730-01-9
                   433730-02-0
                                  433730-03-1
                                                433730-04-2
                                                               433730-05-3
     433730-06-4
                   433730-07-5
                                  433730-08-6
                                                433730-09-7
                                                               433730-10-0
     433730-11-1
                   433730-12-2
                                  433730-13-3
                                                433730-14-4
                                                               433730-15-5
     433730-16-6
                   433730-17-7
                                  433730-18-8
                                                433730-19-9
                                                               433730-20-2
     433730-21-3
                   433730-22-4
                                  433730-23-5
                                                433730-24-6
                                                               433730-25-7
                                                433730-29-1
     433730-26-8
                   433730-27-9
                                  433730-28-0
                                                               433730-30-4
     433730-31-5
                   433730-32-6
                                  433730-33-7
                                                433730-34-8
                                                               433730-35-9
     433730-36-0
                   433730-37-1
                                  433730-38-2
                                                433730-39-3
                                                               433730-40-6
     433730-41-7
                   433730-42-8
                                  433730-43-9
                                                433730-44-0
                                                               433730-45-1
     433730-46-2
                   433730-47-3
                                  433730-48-4
                                                433730-49-5
                                                               433730-50-8
     433730-51-9
                   433730-52-0
                                  433730-53-1
                                                433730-54-2
                                                               433730-55-3
     433730-56-4
                   433730-57-5
                                  433730-58-6
                                                433730-59-7
                                                               433730-60-0
     433730-61-1
                   433730-62-2
                                  433730-63-3
                                                433730-64-4
                                                               433730-65-5
     433730-66-6
                                                433730-69-9
                   433730-67-7
                                  433730-68-8
                                                               433730-70-2
     433730-72-4
                   433730-73-5
                                  433730-75-7
                                                433730-76-8
                                                               433730-77-9
     433730-78-0
                   433730-79-1
                                  433730-80-4
                                                433730-81-5
                                                               433730-82-6
     433730-83-7
                   433730-84-8
                                  433730-85-9
                                                433730-86-0
                                                               433730-87-1
     433730-88-2
                   433730-89-3
                                  433730-90-6
                                                433730-91-7
                                                               433730-92-8
                                                433730-96-2
     433730-93-9
                   433730-94-0
                                  433730-95-1
                                                               433730-97-3
     433730-98-4
                   433730-99-5
                                  433731-00-1
                                                433731-01-2
                                                               433731-02-3
     433731-04-5
                   433731-06-7
                                  433731-08-9
                                                433731-09-0
                                                               433731-10-3
                                  737804-08-9
     433731-11-4
                   737804-07-8
                                                737804-09-0
                                                               737804-10-3
     737804-11-4
                   737804-12-5
                                  737804-13-6
                                                737804-14-7
                                                               737804-15-8
     737804-16-9
                   737804-17-0
                                  737804-18-1
                                                737804-19-2
                                                               737804-20-5
```

737804-24-9

737804-25-0

737804-23-8

737804-21-6

737804-22-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(heterocyclic compds. as antidiabetic and antiobesity agents)
IT 9001-62-1, Lipase 9028-31-3, Aldose reductase 9035-74-9,
Glycogen phosphorylase 54249-88-6, Dipeptidyl peptidase IV
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; heterocyclic compds. as antidiabetic and
 antiobesity agents)

L61 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:333698 HCAPLUS Full-text

DOCUMENT NUMBER:

.140:357333

TITLE:

Preparation of aroylhydroxypyrazoles for treatment of

metabolic disorders

INVENTOR(S):
PATENT ASSIGNEE(S):

Semple, Graeme; Shin, Young Jun Arena Pharmaceuticals, Inc., USA

PCT Int. Appl., 125 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE			APPLICATION NO.						D	ATE	
						-											
WO	2004	0334	31		A2		2004	0422	1	WO 2	003-1	US31	509		2	0031	002 <
WO	2004	0334	31		A3		2004	0729									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,
		OM,	.PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	ŞL,	SY,	TJ,	TM,
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
UA	2003	2826	79		A1	;	2004	0504	1	AU 2	003-	2826	79		20	0031	002 <
PRIORITY	APP	LN.	INFO	.:					1	US 2	002-	4161	93P]	P 20	0021	004 <
										US 2002-417120P					P 20	0021	007 <
									. 1	WO 2	003-1	J\$31	509	1	N 2	0031	002 <

OTHER SOURCE(S): MARPAT 140:357333

ED Entered STN: 23 Apr 2004

GI

AB Title compds. [I; R1 = alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl, benzyl, optionally substituted with ≥1 halo, OH, cyano, NO2, haloalkyl, amino, aminoalkyl, aminodialkyl, alkyl, cycloalkyl, alkoxy, phenoxy, alkenyl,

alkynyl, haloalkoxy, carboxy, carboalkoxy, alkylcarboxamido, arylcarboxamido, heteroarylcarboxamido, heterocyclic carboxamido, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, haloalkylsulfinyl, haloalklcylsulfonyl, alkylureyl, arylureyl; R2 = H, alkyl, haloalkyl, cycloalkyl, alkenyl, alkynyl, PhCH2, Ph, heteroaryl, optionally substituted with ≥1 halo, OH, cyano, nitro, haloalkyl, amino, aminoalkyl, aminodialkyl, alkyl, cycloalkyl, alkoxy, phenoxy, alkenyl, alkynyl, haloalkoxy, carboxy, carboalkoxy, alkylcarboxamido, arylcarboxamido, heteroarylcarboxamido, heterocyclic carboxamido, alkylthio, alkylsulfmyl, alkylsulfonyl, haloalkylthio, haloalkylsulfinyl, haloalkylsulfonyl, alkylureyl or arylureyl groups; Ar = (substituted) pyridyl, pyrimidinyl, pyrazinyl, pyridazinyl], were prepared for the treatment of metabolic-related disorders, including dyslipidemia, atherosclerosis, coronary heart disease, insulin resistance, type 2 diabetes, Syndrome-X and the like (no data). Thus, nicotinyl chloride, 2-methyl-5-propyl-2,4-dihydropyrazol-3one, and Ca(OH)2 were heated at 90° in dioxane for 2 h. to give (5-hydroxy-1methyl-3-propyl-1H- pyrazol-4-yl)pyridin-3-ylmethanone. I may be used in combination with other active agents such α -glucosidase inhibitors, aldose reductase inhibitors, biguanides, HMG-CoA reductase inhibitors, squalene synthesis inhibitors, fibrates, LDL catabolism enhancers, angiotensin converting enzyme inhibitors, and insulin secretion enhancers.

IC ICM C07D231-00

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
 Section cross-reference(s): 1

IT Diabetes mellitus

(non-insulin-dependent; preparation of aroylhydroxypyrazoles for treatment of metabolic disorders)

IT 56-03-1, Biquanide 64-77-7, Tolbutamide 94-20-2, Chloropropamide 114-86-3, Phenformin 339-43-5, Carbutamide 339-44-6, Glymidine 631-27-6, Glyclopyramide 451-71-8, Glyhexamide 535-65-9, Glybuthiazole 657-24-9, Metformin 664-95-9, Tolcyclamide 637-07-0, Clofibrate 692-13-7, Buformin 882-09-7, Clofibric acid 968-81-0, Acetohexamide 1156-19-0, Tolazamide 1228-19-9, Glypinamide 1492-02-0, Glybuzole 2295-31-0D, Thiazolidinedione, derivs 3149-00-6, Phenbutamide 4618-41-1, 1-Butyl-3-metanilylurea 10238-21-8, Glibenclamide 14929-11-4, Simfibrate 21187-98-4, Gliclazide 25046-79-1, Glisoxepid 25812-30-0, Gemfibrozil 26944-48-9, Glibornuride 29094-61-9, Glipizide 30299-08-2, Clinofibrate 31637-97-5, Etofibrate 31980-29-7, 33342-05-1, Gliquidone Nicofibrate 41859-67-0, Bezafibrate 42597-57-9, Ronifibrate, biological studies 49562-28-9, Fenofibrate 52214-84-3, Ciprofibrate 54504-70-0, Theofibrate 55285-45-5, Pirifibrate 55937-99-0, Beclobrate 56180-94-0, Acarbose 62571-86-2, Captopril 68367-52-2, Sorbinil 69047-39-8, Binifibrate 74258-86-9, Alacepril 75330-75-5, Lovastatin 75847-73-3, Enalapril 76420-72-9, Enalaprilat 76547-98-3, Lisinopril 79902-63-9, Simvastatin 81093-37-0, Pravastatin 82159-09-9, Epalrestat 82834-16-0, Perindopril 82964-04-3, Tolrestat 83435-66-9, Delapril 83480-29-9, Voglibose 83647-97-6, Spirapril 85441-61-8, Quinapril 85856-54-8, Moveltipril 86541-75-5, Benazepril 87333-19-5, Ramipril 87679-37-6, Trandolapril 88768-40-5, Cilazapril 89371-37-9, Imidapril 89391-50-4, Imirestat 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 98048-97-6, Fosinopril 105816-04-4, Nateglinide 110703-94-1, Zopolrestat 111025-46-8, Pioglitazone 111223-26-8, Ceronapril 111902-57-9, Temocapril 112733-06-9, Zenarestat 122320-73-4, Rosiglitazone Atorvastatin 145375-43-5, Mitiglinide 145599-86-6, 287714-41-4, Rosuvastatin Cerivastatin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (coadministration; preparation of aroylhydroxypyrazoles for treatment of
 metabolic disorders)

IT 9001-42-7, α-Glucosidase 9015-82-1, Angiotensin converting enzyme

9028-31-3, Aldose reductase 9028-35-7, HMG-CoA reductase 9077-14-9, Squalene synthase

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors coadministration; preparation of aroylhydroxypyrazoles for treatment of metabolic disorders)

L61 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:60541 HCAPLUS Full-text

DOCUMENT NUMBER: 140:105298

TITLE: Bicyclic oligopeptides and their use as glucagon

receptor antagonists

INVENTOR(S): Potterat, Olivier; Streicher, Ruediger; Wagner, Klaus;

Maurer, Till; Mack, Juergen; Peters, Stefan

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma GmbH & Co. KG, Germany

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	PATENT NO.									APPLICATION NO.						ATE	
						-									_		
WO	2004	0075	35		A1		2004	0122	1	WO 2	003-	EP76	57		2	0030,	715 <
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	ΙĹ,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW			
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	2489	189			A1		2004	0122	(CA 2	003-	2489	189		2	0030,	715 <
AU	2003	2467	02		A1		2004	0202	7	AU 2	003-	2467	02		2	0030	715 <
EP	1525	218			A1		2005	0427]	EP 2	003-	7638	64		2	0030'	715 <
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
JP	2006	5055	07		T		2006	0216		JP 2	004-	5206	41		2	0030	715 <
										JS 2	003-	6212	72		2	0030	717 <
US	·7101	848			B2		2006	0905				•					
PRIORIT	Y APP	LN.	INFO	.:]	EP 2	002-	1590	7	-	A 2	0020	717 <
												4167					008 <
									1	WO 2	003-	EP76	57	1	W 2	0030	715 <

OTHER SOURCE(S): MARPAT 140:105298

ED Entered STN: 26 Jan 2004

The invention relates to a bicyclic oligopeptide or ester thereof having the capability to inhibit the glucagon receptor, which essentially consists of (a) a first cyclic group, which comprises at least one cysteine group and is formed by an amide bonding of the N-terminal amino acid with the second carboxylate group of a diacid amino acid, and (b) a second cyclic group which is formed by an amide bonding of an amino acid with the -carboxylate group of said diacid amino acid, and by a disulfide bonding of the C-terminal cysteine and a cysteine group within the first cyclic group (a); and to the use of such bicyclic oligopeptides for the preparation of a medicament for the treatment or prevention of diseases, in which glucagon receptors are involved.

IC ICM C07K007-56

ICS A61K038-12; C07K014-36

CC 1-10 (Pharmacology)

Section cross-reference(s): 2, 10, 34, 63

ST bicyclic oligopeptide glucagon receptor inhibition disease treatment; diabetes treatment bicyclic oligopeptide glucagon receptor inhibition

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ALBP (adipocyte lipid-binding protein), inhibitors; bicyclic
oligopeptides as glucagon receptor inhibitors in relation to
disease treatment and combination with other agents and metabolic
stability)

IT Streptomyces

(DSM 14996, bicyclic oligopeptide from; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Transport proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SGLT2 (sodium-dependent glucose transporter 2), inhibitors;
bicyclic oligopeptides as glucagon receptor inhibitors in
relation to disease treatment and combination with other agents and
metabolic stability)

IT Glucagon-like peptide-1 receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (agonists; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(ampoules; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Actinomyces

(bicyclic oligopeptide from; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Antidiabetic agents

Antiobesity agents

Cardiovascular agents

Diabetes mellitus

Human

Peroxisome proliferators

(bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Glucagon receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(capsules; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(carriers; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Peptides, biological studies

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cyclic; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and

metabolic stability)

IT Lipids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (modulating agents; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Retinoid X receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (modulators; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(suppositories; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(tablets, coated; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Drug delivery systems

(tablets; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Peroxisome proliferator-activated receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (α, modulators; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Peroxisome proliferator-activated receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (γ, modulators; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT 145375-43-5, Mitiglinide

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(analogs; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

9007-92-5, Glucagon, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT 647807-35-0P

IT

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)

(bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT 647807-36-1P

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT 9004-10-8, Insulin, biological studies

```
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (bicyclic oligopeptides as qlucagon receptor inhibitors in
       relation to disease treatment and combination with other agents and
       metabolic stability)
IT
    56-03-1D, Biguanide, derivs. 94-20-2, Chloropropamide
                                                            657-24-9,
                10238-21-8, Glyburide 21187-98-4, Gliclazide
    Metformin
                                                                29094-61-9,
    Glipizide
                56180-94-0, Acarbose 72432-03-2, Miglitol 89750-14-1,
     Glucagon-like peptide I 93479-97-1, Glimepiride 97322-87-7,
     Troglitazone
                  105816-04-4, Nateglinide 111025-46-8, Pioglitazone
     122320-73-4, Rosiglitazone 135062-02-1, Repaglinide 141732-76-5,
     Exendin-4
                161600-01-7, Isaglitazone
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (bicyclic oligopeptides as glucagon receptor inhibitors in
        relation to disease treatment and combination with other agents and
       metabolic stability)
     9033-06-1, Glucosidase 54249-88-6, Dipeptidyl peptidase IV
IT
     300865-11-6, Protein tyrosine phosphatase 1B 391208-93-8, Glycogen
     synthase kinase 3
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; bicyclic oligopeptides as glucagon receptor
        inhibitors in relation to disease treatment and combination
        with other agents and metabolic stability)
REFERENCE COUNT:
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                        4
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L61 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN
                        2004:60532 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        140:105297
TITLE:
                        Bicyclic oligopeptides and their use as glucagon
                        receptor antagonists
                        Potterat, Olivier; Streicher, Ruediger; Wagner, Klaus;
INVENTOR(S):
                        Maurer, Till; Mack, Juergen; Peters, Stefan
PATENT ASSIGNEE(S):
                        Boehringer Ingelheim Pharma GmbH & Co. KG, Germany
SOURCE:
                        PCT Int. Appl., 25 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
    PATENT NO.
                      KIND
                               DATE
                                         APPLICATION NO. DATE
                        ----
                               -----
                                          ------
                                                               -----
    WO 2004007524
                        A2
                               20040122
                                        WO 2003-EP7311
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
            TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003260306
                     A1 20040202 AU 2003-260306
                                                                20030708 <--
    US 2004072736
                        A1 20040415
                                          US 2003-621272
                                                                 20030717 <--
    US 7101848
                        B2
                               20060905
```

PRIORITY APPLN. INFO.:

EP 2002-15907 A 20020717 <--US 2002-416797P P 20021008 <--

WO 2003-EP7311 W 20030708 <--

OTHER SOURCE(S): MARPAT 140:105297

ED Entered STN: 26 Jan 2004

- The invention relates to a bicyclic oligopeptide or ester thereof having the capability to inhibit the glucagon receptor, which essentially consists of (a) a first cyclic group, which comprises at least one cysteine group and is formed by an amide bonding of the N-terminal amino acid with the second carboxylate group of a diacid amino acid, and (b) a second cyclic group which is formed by an amide bonding of an amino acid with the -carboxylate group of said diacid amino acid, and by a disulfide bonding of the C-terminal cysteine and a cysteine group within the first cyclic group (a); and to the use of such bicyclic oligopeptides for the preparation of a medicament for the treatment or prevention of diseases, in which glucagon receptors are involved.
- IC ICM C07K
- CC 1-10 (Pharmacology)
 Section cross-reference(s): 10, 34, 63
- ST bicyclic oligopeptide glucagon receptor inhibition disease treatment; diabetes treatment bicyclic oligopeptide glucagon receptor inhibition
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (ALBP (adipocyte lipid-binding protein), inhibitors; bicyclic
 oligopeptides as glucagon receptor inhibitors in relation to
 disease treatment and combination with other agents and metabolic
 stability)
- IT Streptomyces

(DSM 14996, bicyclic oligopeptide from; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

- IT Transport proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (SGLT2 (sodium-dependent glucose transporter 2), inhibitors;
 bicyclic oligopeptides as glucagon receptor inhibitors in
 relation to disease treatment and combination with other agents and
 metabolic stability)
- IT Glucagon-like peptide-1 receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (agonists; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)
- IT Drug delivery systems

(ampoules; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Actinomyces

(bicyclic oligopeptide from; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Antidiabetic agents

Antiobesity agents

Cardiovascular agents

Diabetes mellitus

Human

(bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

IT Glucagon receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and

10/519155 metabolic stability) IT Drug delivery systems (capsules; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) IT Drug delivery systems (carriers; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) Peptides, biological studies TT RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (cyclic; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) IT Lipids, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (modulating agents; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) IT Retinoid X receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (modulators; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) Drug delivery systems TΤ (suppositories; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) Drug delivery systems IT (tablets, coated; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) Drug delivery systems IT (tablets; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) TΤ Peroxisome proliferator-activated receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (α, agonists; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) Peroxisome proliferator-activated receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (γ, modulators; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) 145375-43-5, Mitiglinide RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (analogs; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination

with other agents and metabolic stability)

IT 9007-92-5, Glucagon, biological studies

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability)

TТ 647807-35-0P

RL: BSU (Biological study, unclassified); NPO (Natural product

ΙT

IT

IT

IT

10/519155 occurrence); PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) 647807-36-1P RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) 9004-10-8, Insulin, biological studies RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) 56-03-1D, Biguanide, derivs. 94-20-2, Chloropropamide 657-24-9, Metformin 10238-21-8, Glyburide 21187-98-4, Gliclazide 29094-61-9, Glipizide 56180-94-0, Acarbose 72432-03-2, Miglitol 89750-14-1, 93479-97-1, Glimepiride Glucagon-like peptide I 97322-87-7, 105816-04-4, Nateglinide 111025-46-8, Pioglitazone Troglitazone 135062-02-1, Repaglinide 122320-73-4, Rosiglitazone 141732-76-5, 161600-01-7, Isaglitazone Exendin-4 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) 9033-06-1, Glucosidase 54249-88-6, Dipeptidyl peptidase IV 300865-11-6, Protein tyrosine phosphatase 1B 391208-93-8, Glycogen synthase kinase 3 RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; bicyclic oligopeptides as glucagon receptor inhibitors in relation to disease treatment and combination with other agents and metabolic stability) L61 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:20487 HCAPLUS Full-text DOCUMENT NUMBER: 140:65256 TITLE: Drug composition for prevention or inhibition of advance of diabetic complication INVENTOR(S): Mikoshiba, Imao; Suzuki, Hisao; Kiyono, Yuji Kissei Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 22 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATE	NT 1	NO.			KIN	D :	DATE			APPL	ICAT:	ION 1	NO.		D	ATE		
						-		-			- -				-			
WO 2	WO 2004002474 W: AE, AG, AL					A1 20040108			WO 2003-JP8084							0030	526 <	-
Ī	W :	ΑE,	AG,	ΑL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ',	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	

```
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
             TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040108 CA 2003-2489660
     CA 2489660
                         A1
                                                                   20030626 <--
    AU 2003244083
                         A1
                                20040119
                                            AU 2003-244083
                                                                   20030626 <--
    EP 1552830
                                20050713
                                            EP 2003-761816
                                                                   20030626 <--
                         A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1665499
                                20050907
                                            CN 2003-815245
                                                                   20030626 <--
                         Α
                                20050929
                                            US 2004-519155
     US 2005215607
                          A1
                                                                   20041227 <--
                                            JP 2002-189559
PRIORITY APPLN. INFO.:
                                                                A 20020628 <--
                                            WO 2003-JP8084
                                                                W 20030626 <--
     Entered STN: 11 Jan 2004
ED
     Disclosed is a drug composition capable of attaining a good state of blood
AB
     sugar control so as to enable correcting postprandial high blood sugar levels
     or high blood sugar levels at early fasting time. In particular, a drug
     composition for prevention or inhibition of advance of diabetic complications
     to be taken before meals, comprising 5 to 45 mg, in terms of one-time dose, of
     mitiglinide or its pharmacol. acceptable salt or a hydrate thereof, e.g.,
     mitiglinide calcium salt hydrate. The drug composition is highly useful for
     the prevention or inhibition of advance of, for example, diabetic microangio
     complications and arteriosclerosis because the ratio of occurrence of side
     effects, such as low blood sugar level symptom and gastrointestinal tract
     disorder, is low. A tablet containing mitiglinide calcium salt hydrate 10
     mg/tablet was formulated, and its effect on blood sugar level and side effect
     in patients with type 2 biabetes was examined
IC
     ICM A61K031-4035
     ICS A61P003-10; A61P009-00; A61P009-10; A61P013-12; A61P027-02;
          A61P043-00
     63-6 (Pharmaceuticals)
CC
     Section cross-reference(s): 1
ST
    mitiglinide diabetic complication treatment oral
    Blood vessel, disease
IT
        (diabetic microangiopathy; drug composition for prevention
        or inhibition of advance of diabetic complication)
IT
     Kidney, disease
        (diabetic nephropathy; drug composition for prevention
        or inhibition of advance of diabetic complication)
     Eye, disease
IT
        (diabetic retinopathy; drug composition for prevention
        or inhibition of advance of diabetic complication)
IT
     Arteriosclerosis
        (diabetic; drug composition for prevention or
        inhibition of advance of diabetic complication)
IT
        (drug composition for prevention or inhibition of
        advance of diabetic complication)
IT
    Diabetes mellitus
        (non-insulin-dependent; drug composition for prevention or
        inhibition of advance of diabetic complication)
IT
    Antidiabetic agents
        (oral; drug composition for prevention or inhibition of
        advance of diabetic complication)
ΙT
     Drug delivery systems
        (tablets; drug composition for prevention or inhibition
        of advance of diabetic complication)
```

IT 50-99-7, D-Glucose, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; drug composition for prevention or inhibition of advance of diabetic complication)

IT 145375-43-5, Mitiglinide 207844-01-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(drug composition for prevention or inhibition of

advance of diabetic complication)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:20486 HCAPLUS Full-text

DOCUMENT NUMBER: 140:65255

TITLE: Drug composition for blood sugar control INVENTOR(S): Mikoshiba, Imao; Suzuki, Hisao; Kiyono, Yuji

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

WO 2004002473 A1 20040108 WO 2003-JP8083 20030626 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-244082 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 US 2005267195 A1 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227 PRIORITY APPLN. INFO.:	PAT	PATENT NO.					KIND DATE			APPLICATION NO.						D	ATE	
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-244082 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 AU 2003244082 A1 20040119 AU 2003-761815 20030626 AU 2003244082 A1 20050525 EP 2003-761815 20030626 AR: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227 							-									-		
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227	WO	2004	0024	73		A1		2004	0108	1	WO 2	003-	JP80	83		2	0030	626
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	TR,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227			KG,	KZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
CA 2490250 A1 20040108 CA 2003-2490250 20030626 AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
AU 2003244082 A1 20040119 AU 2003-244082 20030626 EP 1532979 A1 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			BF,	BJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
EP 1532979 Al 20050525 EP 2003-761815 20030626 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 Al 20051201 US 2004-519102 20041227	CA	2490	250			A1		2004	0108	•	CA 2	003-	2490	250		2	0030	626
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227	AU	2003	2440	82		A1		2004	0119		AU 2	003-:	2440	82		2	0030	626
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227	EP	1532	979			A 1		2005	0525		EP 2	003-	7618	15		2	0030	626
CN 1665498 A 20050907 CN 2003-815244 20030626 US 2005267195 A1 20051201 US 2004-519102 20041227		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
US 2005267195 A1 20051201 US 2004-519102 20041227			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
	CN	1665	498			Α		2005	0907	•	CN 2	003-	8152	44		2	0030	626
DDIODITY ADDING THEO. TO 2002 100EEC A 20020C20	US	2005	2671	95		A1		2005	1201	1	US 2	004-	5191	02		2	0041	227
PRIORITI APPLIN. INFO.: 0P 2002-189556 A 20020628	PRIORITY	PRIORITY APPLN. INFO.:								,	JP 2	002-	1895	56	2	A 2	0020	628
WO 2003-JP8083 W 20030626										1	WO 2	003-	JP80	83	1	W 2	0030	626

ED Entered STN: 11 Jan 2004

Disclosed is a drug composition capable of attaining a good state of blood sugar control so as to enable correcting postprandial high blood sugar levels or high blood sugar levels at early fasting time. In particular, a drug composition for blood sugar control to be taken before meals, comprising 5 to 45 mg, in terms of one-time dose, of mitiglinide or its pharmacol. acceptable salt or a hydrate thereof, e.g., mitiglinide calcium salt hydrate. The drug composition is highly useful for the prevention and treatment of, for example, type 2 diabetes because the ratio of occurrence of side effects, such as low blood sugar level symptom and gastrointestinal tract disorder, is low. A tablet containing mitiglinide calcium salt hydrate 10 mg/tablet was formulated, and its effect on blood sugar level and side effect in patients with type 2 diabetes was examined

```
IC
     ICM A61K031-4035
     ICS A61P003-10; A61P043-00
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1
ST
     mitiglinide oral type 2 antidiabetic
IT
       Hyperglycemia
        (drug composition for blood sugar control containing mitiglinide)
IT
     Diabetes mellitus
        (non-insulin-dependent; drug composition for blood sugar control containing
        mitiglinide)
     Antidiabetic agents
IT
        (oral; drug composition for blood sugar control containing mitiglinide
IT
     Drug delivery systems
        (tablets; drug composition for blood sugar control containing
        mitiglinide)
     50-99-7, D-Glucose, biological studies
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (blood; drug composition for blood sugar control containing mitiglinide
IT
     145375-43-5, Mitiglinide 207844-01-7
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (drug composition for blood sugar control containing mitiglinide)
REFERENCE COUNT:
                         15
                               THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L61 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2004:496322 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         141:167555
TITLE:
                         Rapid-onset hypoglycemic effect of mitiglinide
                         calcium dihydrate (KAD-1229), a novel
                         antipostprandial-hyperglycemia agent.
                         comparison with glimepiride
                         Ojima, Kazuma; Aoyagi, Ikumi; Fujimori, Yoshikazu;
AUTHOR (S):
                         Ichikawa, Kiyoshi; Kusama, Hiroshi; Kojima, Masami;
                         Nagasawa, Tatsuya; Ohta, Masanao; Okuhara, Yuji;
                         Kobayashi, Maiko; Tamura, Kei; Kuroda, Junji; Shibata,
                         Nobuo
CORPORATE SOURCE:
                         Pharmacology Research Lab. R&D, Kissei Pharmaceutical
                         Co., Ltd., Japan
SOURCE:
                         Japanese Pharmacology & Therapeutics (2004), 32(3),
                         161-167
                         CODEN: JPTABU
                         Raifu Saiensu Shuppan K.K.
PUBLISHER:
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Japanese
     Entered STN: 21 Jun 2004
AB
     The purpose of the present study was to evaluate the hypoglycemic effect of
     mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-
     hyperglycemia agent, by comparing it with that of glimepiride, a sulfonylurea
     agent. In fasted beagle dogs, KAD-1229 (0.15, 0.3 mg/kg) or glimepiride
     (0.03, 0.06 mg/kg) was administered orally either with no load or just before
     an oral glucose load. Blood samples were taken from the cephalic vein for the
     determination of plasma glucose levels. In expts. with no load, plasma
     insulin levels were also measured. With no glucose load, the hypoglycemic
     effect of KAD-1229 had a faster onset (at 0.25 h) than that of glimepiride (at
     1 h), and a shorter duration (0.25-1 h) than that of glimepiride (1-8 h).
```

KAD-1229 stimulated insulin secretion, the peak level occurring within 0.25 h

and a return to baseline within 1 h. In contrast, the peak insulin level occurred at 1 h post-dose in the glimepiride groups. In the oral glucose tolerance test, KAD-1229 rapidly inhibited the increase in plasma glucose (at 0.25 h), and its effect had disappeared within 2 h after its administration. Glimepiride induced a lowering of the plasma glucose level at 1 h after its administration, and at a dose of 0.06 mg/kg, the glucose level given did not return to control values within 8 h. The hypoglycemic effect of KAD-1229 was clearly faster in onset and shorter lasting than that of glimepiride. KAD-1229 can be expected to be more effective than glimepiride at normalizing postprandial hyperglycemia.

CC 1-10 (Pharmacology)

Antidiabetic agents TT Diabetes mellitus

> (rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-hyperglycemia agent. comparison with glimepiride)

IT 50-99-7, D-Glucose, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandialhyperglycemia agent. comparison with glimepiride)

9004-10-8, Insulin, biological studies IT

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-hyperglycemia agent. comparison with glimepiride)

IT 93479-97-1, Glimepiride 145525-41-3, KAD-1229

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(rapid-onset hypoglycemic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial-hyperglycemia agent. comparison with glimepiride)

L61 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:345396 HCAPLUS Full-text

DOCUMENT NUMBER:

141:325483

TITLE: Rapid onset-insulinotropic effect of

> mitiglinide calcium dihydrate (KAD-1229), a novel antipostpradial hyperglycemic agent:

comparison with nateglinide

AUTHOR (S): Ojima, Kazuma; Ichikawa, Kiyoshi; Fujimori, Yoshikazu;

> Aoyagi, Ikumi; Yamato, Tokuhisa; Tsuji, Atsutoshi; Kusama, Hiroshi; Kojima, Masami; Shibata, Nobuo

CORPORATE SOURCE: Pharmacology Research R & D, Kissei Pharmaceutical

Co., Ltd., Japan

SOURCE: Japanese Pharmacology & Therapeutics (2004), 32(2),

73-80

CODEN: JPTABU

PUBLISHER: Raifu Saiensu Shuppan K.K.

DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 28 Apr 2004

AB Objectives: The purpose of the present study was to evaluate the insulinotropic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostprandial hyperglycemic agent, by comparison with that of nateglinide. Methods: Mitiglinide calcium dihydrate or nateglinide was administered orally just before an oral-sucrose or liquid-meal load in normal rats, and in mild, moderate, or severe streptozotocin-injected diabetic rats. The plasma insulin and glucose levels were measured. Results: Mitiglinide calcium dihydrate (1 mg/kg) and nateglinide (50 mg/kg) decreased the plasma glucose levels

significantly at 15-120 min and 15-60 min, resp. in normal rats, and at 30-90 min and 30-60 min, resp., in mildly diabetic rats. These drugs increased the plasma insulin levels at 5-45 min and 5-15 min, resp., in normal rats, and at 15-60 min and 15-45 min, resp., in mildly diabetic rats. In moderately diabetic rats, the antihyperglycemic effects of mitiglinide calcium dihydrate (1 and 3 mg/kg) and nateglinide (50 and 100 mg/kg) were evident at 30-120 min and 30-60 min, resp. In the same rats, mitiglinide, but not nateglinide, significantly increased the plasma insulin levels at 30 min after its administration. Mitiglinide also exhibited antihyperglycemic and insulinotropic effects in the severely diabetic rats. Conclusion: Mitiglinide and nateglinide are suitable drugs for controlling postprandial hyperglycemia. Their antihyperglycemic effects were probably secondary to their rapid-onset, short-lasting insulinotropic effects, and mitiglinide seemed to be a more potent rapid-onset insulinotropic drug than nateglinide.

CC 1-10 (Pharmacology)

insulinotropic mitiglinide calcium dihydrate KAD1229 ST antipostpradial hyperglycemia nateglinide

IT Antidiabetic agents

Hyperglycemia

(rapid onset-insulinotropic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostpradial hyperglycemic agent: comparison with nateglinide)

IT 105816-04-4, Nateglinide 145525-41-3, KAD-1229

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(rapid onset-insulinotropic effect of mitiglinide calcium dihydrate (KAD-1229), a novel antipostpradial hyperglycemic agent: comparison with nateglinide)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:931184 HCAPLUS Full-text

DOCUMENT NUMBER: 140:8791

TITLE: Therapeutic agent for diabetes

INVENTOR (S): Nakanishi, Satoshi; Yano, Hiroshi; Mori, Kiyotoshi;

Ogino, Fumiko; Kusaka, Hideaki; Ueno, Kimihisa;

Nomoto, Yuji; Matsuda, Yuzuru

PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND D	ATE A	APPLICATION NO.	DATE
WO 2003097064	A1 20	0031127 W	NO 2003-JP6136	20030516 <
W: AE, AG,	AL, AM, AT,	AU, AZ, BA,	BB, BG, BR, BY,	BZ, CA, CH, CN,
CO, CR,	CU, CZ, DE, I	DK, DM, DZ,	EC, EE, ES, FI,	GB, GD, GE, GH,
GM, HR,	HU, ID, IL,	IN, IS, JP,	KE, KG, KR, KZ,	LC, LK, LR, LS,
LT, LU,	LV, MA, MD, N	MG, MK, MN,	MW, MX, MZ, NI,	NO, NZ, OM, PH,
PL, PT,	RO, RU, SC, S	SD, SE, SG,	SK, SL, TJ, TM,	TN, TR, TT, TZ,
UA, UG,	US, UZ, VC, Y	VN, YU, ZA,	ZM, ZW	
RW: GH, GM,	KE, LS, MW, N	MZ, SD, SL,	SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,
KG, KZ,	MD, RU, TJ, 1	TM, AT, BE,	BG, CH, CY, CZ,	DE, DK, EE, ES,
FI, FR,	GB, GR, HU, :	IE, IT, LU,	MC, NL, PT, RO,	SE, SI, SK, TR,
BF, BJ,	CF, CG, CI, C	CM, GA, GN,	GQ, GW, ML, MR,	NE, SN, TD, TG
AU 2003234929	A1 20	0031202 A	AU 2003-234929	20030516 <

PRIORITY APPLN. INFO.: JP 2002-143598 A 20020517 <--W 20030516 <--WO 2003-JP6136 OTHER SOURCE(S): MARPAT 140:8791 Entered STN: 28 Nov 2003 A therapeutic agent for diabetes, is characterized by containing at least one AB member selected among sulfonylurea antidiabetic agents and sulfonylurea-free K+ ATP channel blocker antidiabetic agents and at least one member selected among a fused purine derivative and pharmacol. acceptable salts of these. For example, a tablet contained glibenclamide 2, (R)-2-cyclopentyl-7,8-dihydro-8-(4-picolyl)-4-propyl-1H-imidazo[2,1-i]- purin-5(4H)-one d-tartaric acid salt 18, lactose 143.4, starch 30, hydroxypropyl cellulose 6, and Mg stearate 0.6 mg. IC ICM A61K031-522 . ICS A61K031-198; A61K031-4453; A61K031-64; A61K045-00; A61P003-10 63-6 (Pharmaceuticals) CC Section cross-reference(s): 1 ST antidiabetic sulfonylurea potassium channel blocker purine deriv; tablet glibenclamide imidazopurine deriv antidiabetic combination IT Potassium channel blockers (ATP-sensitive; antidiabetic combinations for treatment and prevention of diabetes complications and side effects) IT Sulfonylureas RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antidiabetic combinations for treatment and prevention of diabetes complications and side effects) IT Drug delivery systems (capsules; antidiabetic combinations for treatment and prevention of diabetes complications and side effects) Drug delivery systems IT (tablets; antidiabetic combinations for treatment and prevention of diabetes complications and side effects) 64-77-7, Tolbutamide 94-20-2, Chlorpropamide 339-43-5, Carbutamide IT 631-27-6, Glyclopyramide 664-95-9, Glycyclamide 968-81-0, 1156-19-0, Tolazamide 1492-02-0, Glybuzol Acetohexamide 10238-21-8, Glibenclamide 21187-98-4, Gliclazide 24477-37-0, Glisolamide 25046-79-1, Glisoxepide 26944-48-9, Glibornuride 29094-61-9, Glipizide 32797-92-5, Glisentide 33342-05-1, Gliquidone 93479-97-1, Glimepiride 105816-04-4, Nateglinide 135062-02-1, Repaglinide 145375-43-5, Mitiglinide 254426-47-6 348165-49-1 348362-73-2 349554-62-7 349554-69-4 627512-37-2 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antidiabetic combinations for treatment and prevention of diabetes complications and side effects) REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L61 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:777602 HCAPLUS Full-text DOCUMENT NUMBER: 139:296975 Combination of a HMG-CoA reductase TITLE: inhibitor and an insulin secretion enhancer INVENTOR(S): Damon, Robert Edson; Hughes, Thomas Edward; Burkey, Bryan PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

PCT Int. Appl., 32 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

```
APPLICATION NO.
    PATENT NO.
                       KIND
                              DATE
                                                                DATE
                                         . -----
                        ----
                              -----
                                                                _____
    WO 2003080070
                        A2
                              20031002
                                          WO 2003-EP2978
                                                                20030321 <--
                        A3
    WO 2003080070
                              20040325
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU,
            LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC,
            SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW
        RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
            DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
            SI, SK, TR
                                          CA 2003-2479880
    CA 2479880
                        A1
                              20031002
                                                                20030321 <--
    AU 2003209745
                        A1
                              20031008
                                          AU 2003-209745
                                                                20030321 <--
    US 2004002519
                        A1
                              20040101
                                         US 2003-393798
                                                                20030321 <--
    EP 1523316
                        A2
                              20050420
                                        EP 2003-744834
                                                                20030321 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                              20050720
                                         CN 2003-806655
    CN 1642559
                        Α
                                                                20030321 <--
    JP 2005526788
                         Т
                              20050908
                                          JP 2003-577896
                                                                20030321 <--
    BR 2003008613
                              20050301
                                         BR 2003-8613
                                                                20030324 <--
                        Α
                              20041220
                                          NO 2004-4487
                                                                20041020 <--
    NO 2004004487
                        Α
    US 2007027197
                              20070201
                                          US 2006-497130
                                                                20060801 <--
                        A1
PRIORITY APPLN. INFO.:
                                          US 2002-366752P
                                                            P 20020322 <--
                                          US 2003-393798
                                                             B1 20030321 <--
                                          WO 2003-EP2978
                                                             W 20030321 <--
```

ED Entered STN: 03 Oct 2003

The present invention relates to a combination pharmaceutical composition comprising as active ingredients (i) a HMG-CoA reductase inhibitor or a salt, (ii) (a) an insulin secretion enhancer or a salt or (b) an insulin sensitizer or a salt. Thus, capsules contained fluvastatin sodium 42.962, CaCO3 125.680, NaHCO3 4.000, microcryst. cellulose 114.440, pregelatinized starch 83.800, Mg stearate 21.00, and talc 18.860 mg, and water qs.

IC ICM A61K031-64

ICS A61K031-40; A61K031-015; A61K031-435; A61K031-21; A61P005-50; A61K031-404; A61K031-155; A61P003-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

- ST insulin secretion enhancer HMGCoA reductase inhibitor
- IT Drug delivery systems

(capsules; combination of HMG-CoA reductase inhibitor and insulin secretion enhancer)

IT Antiarteriosclerotics

Antidiabetic agents

Antihypertensives

Antiobesity agents

Atherosclerosis

Hypertension

Hypolipemic agents

Hypothyroidism

Kidney, disease

Obesity

(combination of HMG-CoA reductase inhibitor and insulin secretion enhancer)

```
IT
     Dyslipidemia
     Hyperlipidemia
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (combination of HMG-CoA reductase inhibitor and
        insulin secretion enhancer)
IT
     Sulfonylureas
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination of HMG-CoA reductase inhibitor and
        insulin secretion enhancer)
IT
     Artery, disease
        (coronary; combination of HMG-CoA reductase inhibitor
        and insulin secretion enhancer)
     Kidney, disease
IT
        (failure; combination of HMG-CoA reductase inhibitor
        and insulin secretion enhancer)
IT
     Liver, disease
        (fatty; combination of HMG-CoA reductase inhibitor
        and insulin secretion enhancer)
IT
     Heart, disease
        (infarction, survival post; combination of HMG-CoA reductase
        inhibitor and insulin secretion enhancer)
     Metabolic disorders
IT
        (metabolic syndrome X; combination of HMG-CoA reductase
        inhibitor and insulin secretion enhancer)
IT
     Diabetes mellitus
        (non-insulin-dependent; combination of HMG-CoA reductase
        inhibitor and insulin secretion enhancer)
     Ovary, disease
IT
        (polycystic; combination of HMG-CoA reductase
        inhibitor and insulin secretion enhancer)
IT
     Drug delivery systems
        (tablets; combination of HMG-CoA reductase inhibitor
        and insulin secretion enhancer)
IT
     64-77-7, Tolbutamide
                           94-20-2, Chlorpropamide 339-43-5, Carbutamide
     451-71-8, Glyhexamide
                           535-65-9, Glybuthiazole 631-27-6 657-24-9,
                664-95-9, Tolcyclamide 968-81-0, Acetohexamide 1156-19-0,
     Metformin
     Tolazamide
                  1228-19-9, Glypinamide 1492-02-0, Glybuzole 3149-00-6,
     Phenbutamide
                    3459-20-9, Glymidine 4618-41-1, 1-Butyl-3-metanilylurea
     10238-21-8, Glibenclamide
                                21187-98-4, Gliclazide
                                                         25046-79-1,
     Glisoxepid 26944-48-9, Glibornuride 29094-61-9, Glipizide
     33342-05-1, Gliquidone 75330-75-5, Lovastatin 79902-63-9, Simvastatin 81093-37-0, Pravastatin 89750-14-1, GLP-1 93479-97-1, Glimepiride
     93957-54-1, Fluvastatin 93957-55-2, Fluvastatin sodium
                                                                 105816-04-4,
     Starlix DS 123475-27-4 134523-00-5, Atorvastatin 135062-02-1,
     Repaglinide 138347-77-0 145375-43-5, Mitiglinide
     145599-86-6, Cerivastatin 147511-69-1, Pitavastatin 207556-62-5
     223607-24-7
                   274901-16-5 287714-41-4, Rosuvastatin 352513-61-2
     355393-49-6
                   355393-50-9 355393-52-1
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination of HMG-CoA reductase inhibitor and
        insulin secretion enhancer)
IT
     9028-35-7, HMG-CoA reductase
                                    54249-88-6, DPP-IV
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitor; combination of HMG-CoA reductase
        inhibitor and insulin secretion enhancer)
     9004-10-8, Insulin, biological studies
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (secretion enhancer; combination of HMG-CoA reductase
```

inhibitor and insulin secretion enhancer)

```
L61 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2003:511859 HCAPLUS Full-text
DOCUMENT NUMBER:
                        139:90459
TITLE:
                        Use of an immediate-release powder in pharmaceutical
                        and nutraceutical compositions
                        Besse, Jerome; Besse, Laurence
INVENTOR(S):
PATENT ASSIGNEE(S):
                        U.S. Pat. Appl. Publ., 5 pp.
                        CODEN: USXXCO
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                                         APPLICATION NO.
                      KIND
                               DATE
                                                                DATE
                               -----
     -----
                        ----
                                          -----
                                                                 _____
                               20030703 US 2002-106923
20030704 FR 2001-16934
    US 2003124191
                        A1
                                                                 20020325 <--
    FR 2834212
                        A1
                                                                20011227 <--
    FR 2834212
                               20040709
                       B1
    CA 2471903
                        A1
                               20030710 CA 2002-2471903
                                                                20021227 <--
                               20030710 WO 2002-FR4575
    WO 2003055464
                        A1
                                                                20021227 <--
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20030715 AU 2002-364489
    AU 2002364489
                        A1
                                                                 20021227 <--
                         A1
                                        EP 2002-799854
    EP 1458356
                               20040922
                                                                 20021227 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
    BR 2002015380
                        Α
                               20041207 BR 2002-15380
                                                                20021227 <--
                        A1
    US 2005118272
                               20050602 US 2003-500213
                                                                20021227 <--
    JP 2005520799
                        T
                               20050714 JP 2003-556042
                                                               20021227 <--
                       A2
    HU 200500509
                               20050928 HU 2005-509
                                                                20021227 <--
                             20040914 NO 2004-3172
    NO 2004003172
                       Α
                                                                20040726 <--
                                          FR 2001-16934
                                                            A 20011227 <--
PRIORITY APPLN. INFO.:
                                          WO 2002-FR4575
                                                             W 20021227 <--
ED
    Entered STN: 04 Jul 2003
AB
     The present invention relates to the use of a powder comprising at least one
     active substance, at least one surfactant, at least one wetting agent and at
     least one diluent, for preparing a pharmaceutical or nutraceutical
     composition, this composition allowing rapid and immediate release of the
     active substance. Granules containing phloroglucinol 10, sorbitol 89, and
     propylene glycol 1% were prepared
IC
    ICM A61K031-7048
         A61K031-56; A61K031-522; A61K031-4965; A61K031-445; A61K031-573;
         A61K031-496; A61K031-4178; A61K031-135
INCL 424489000; 514182000; 514177000; 514178000; 514029000; 514649000;
    514317000; 514343000; 514263350; 514554000
CC
    63-6 (Pharmaceuticals)
IT
    Diabetes mellitus
        (non-insulin-dependent; use of immediate-release powder in
       pharmaceutical and nutraceutical compns.)
```

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses.)

39391-18-9, Cyclooxygenase

IT

(inhibitors; use of immediate-release powder in pharmaceutical and nutraceutical compns.)

IT 50-03-3, Hydrocortisone acetate 50-23-7, Hydrocortisone 50-28-2, Oestradiol, biological studies 50-28-2D, Oestradiol, derivs. 50-70-4, Sorbitol, biological studies 50-99-7, Dextrose, biological studies 51-34-3, Scopolamine 51-98-9, Norethisterone acetate 54-11-5, Nicotine 54-21-7, Sodium salicylate 55-63-0, Trinitrin 56-81-5, Glycerol, biological studies 57-09-0, Cetrimonium bromide 57-13-6, Urea, biological studies 57-47-6, Physostigmine 57-48-7, Fructose, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 57-63-6, Ethinyl oestradiol 57-83-0, Progesterone, biological studies 58-08-2, Caffeine, biological 58-22-0, Testosterone 59-66-5, Acetazolamide studies 60-40-2, Mecamylamine 63-42-3, Lactose 64-17-5, Ethanol, biological studies 67-73-2, Fluocinolone acetonide 69-65-8, Mannitol 71-52-3, Bicarbonate, biological studies 81-13-0, Dexpanthenol 87-33-2, Isosorbide dinitrate 87-99-0, Xylitol 89-78-1, Menthol) 94-36-0, Benzoyl peroxide, biological studies 97-53-0, Eugenol 101-20-2, Triclocarban 106-24-1, Geraniol 106-25-2, Nerol 106-60-5, 5-Aminolevulinic acid 108-73-6, Phloroglucinol 110-27-0, Isopropyl myristate 112-62-9, Methyl oleate 112-80-1, Oleic acid, biological studies 113-45-1, Methyl phenidate 114-07-8, Erythromycin 123-03-5, 124-94-7, Triamcinolone 137-58-6, Lidocaine Cetylpyridinium chloride 139-33-3 143-07-7, Lauric acid, biological studies 144-80-9, Sulphacetamide 145-42-6, Sodium taurocholate 147-24-0, Diphenhydramine hydrochloride 151-21-3, Sodium lauryl sulphate, biological studies 152-97-6, Fluocortolone 302-79-4, Tretinoin 303-40-2, Fluocortolone 356-12-7, Fluocinolide 437-38-7, Fentanyl 443-48-1, hexanoate 470-82-6, Eucalyptol 471-34-1, Calcium carbonate, Metronidazole 497-19-8, Sodium carbonate, biological studies biological studies 521-18-6, Dihydrotestosterone 585-86-4, Lactitol 611-53-0, Ibacitabine 638-94-8, Desonide 645-92-1 745-65-3, Alprostadil 797-63-7, Levonorgestrel 863-57-0, Sodium glycocholate 1180-95-6, Sodium 2002-29-1, Flumetasone pivalate taurodeoxycholate 2152-44-5, 2438-72-4, Bufexamac 3764-87-2 Betamethasone valerate 4205-90-7, 4394-00-7, Nifluminic acid Clonidine 4759-48-2, Isotretinoin 4985-25-5, Pyrazinobutazone 5104-49-4, Flurbiprofen 5593-20-4, Betamethasone dipropionate 5633-20-5, Oxybutynin 5716-20-1, Bamethan 6805-41-0, Escin 7757-93-9, Dibasic calcium phosphate 7758-87-4, Tribasic calcium phosphate 7759-35-5, Nestorone 777 Calcium sulphate 9000-30-0, Guar gum 9002-72-6, Growth hormone 9003-39-8, Povidone 9004-10-8, Insulin, biological studies 9004-32-4, Sodium carboxymethylcellulose 9004-53-9, Dextrins 9004-57-3, Ethylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose 9005-25-8, Starch, biological studies Alginic acid 9005-63-4D, Polyoxyethylene sorbitan, esters with fatty 9042-14-2, Dextran sulphate 9005-65-6, Polysorbate 80 12619-70-4, Cyclodextrins 9087-70-1, Aprotinin 12794-10-4, 14611-51-9, Selegiline 15307-86-5, Diclofenac Benzodiazepine 15687-27-1, Ibuprofen 16409-34-0, Sodium glycodeoxycholate 18559-94-9, 19216-56-9, Prazosin 22071-15-4, Ketoprofen 22832-87-7, Miconazole nitrate 22916-47-8, Miconazole 23674-86-4, Difluprednate 24169-02-6, Econazole nitrate 25122-46-7, Clobetasol propionate 25322-68-3, Polyethylene glycol 25655-41-8, Povidone Iodine 25717-80-0, Molsidomine 28981-97-7, Alprozolam 29205-06-9, Fluocortolone pivalate 29679-58-1, Fenoprofen 29984-33-6, Vidarabine monophosphate 34580-13-7, Ketotifen 36322-90-4, Piroxicam 36505-84-7, Buspirone 38304-91-5, Minoxidil 39219-28-8, Promestriene 39404-33-6, Dextrates 39809-25-1, Penciclovir 41570-61-0, Tulobuterol 51022-69-6, Amcinonide 52485-79-7, Buprenorphine 53016-31-2,

Norelgestromin 59198-70-8, Diflucortolone Valerate 59227-89-3, Azone 59277-89-3, Acyclovir 60282-87-3, Gestodene 65277-42-1, Ketoconazole 66104-22-1, Pergolide 66734-13-2, Alclometasone dipropionate 72522-13-5, Eptazocine 74103-06-3, Ketorolac 80214-83-1, Roxithromycin 99011-02-6, Imiquimod 99755-59-6, Rotigotine 106685-40-9, Adapalene 113775-47-6, Dexmedetomidine 118292-40-3, Tazarotene 119141-88-7, Esomeprazole 122852-42-0, Alosetron 129722-12-9, Aripiprazole 133099-04-4, Darifenacin 137234-62-9, Voriconazole 141563-69-1, OrZel 143322-58-1, Eletriptan 145158-71-0, Tegaserod 145209-50-3, Thiatolserine 145375-43-5, Mitiglinide 147511-69-1, Pitavastatin 147657-22-5, Calcipotriol monohydrate 153259-65-5, Cilomilast 154189-24-9, Viozan 159776-70-2, Melagatran 163222-33-1 167305-00-2, Omapatrilat 178979-85-6, Capravirine 179463-17-3, 181695-72-7, Valdecoxib 198470-84-7, Parecoxib Caspofungin acetate 202409-33-4, Etoricoxib 287714-41-4, Rosuvastatin 552881-25-1, Crilanomer RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of immediate-release powder in pharmaceutical and nutraceutical compns.)

L61 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:473243 HCAPLUS Full-text

DOCUMENT NUMBER:

139:41849

TITLE:

Pharmaceutical compositions containing a renin

inhibitor and antidiabetics

INVENTOR(S):

Webb, Randy Lee

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003114389	A1	20030619	US 2002-290651	20021108 <
US 2005101638	A1	20050512	US 2004-14141	20041216 <
US 2007093431	A1	20070426	US 2006-614401	20061221 <
PRIORITY APPLN. INFO.:			US 2001-350708P P	20011113 <
•			US 2002-290651 B1	l 20021108 <
			US 2004-14141 A	20041216

ED Entered STN: 20 Jun 2003

The invention relates to a composition comprising a renin inhibitor (e.g., aliskiren) or a salt thereof and at least 1 antidiabetic agent. Thus, a hemifumarate of aliskiren 1000, corn starch 680, colloidal silica 200, Mg stearate 20, stearic acid 50, sodium carboxymethyl starch 250, and water qs to 1000 q.

IC ICM A61K038-04

ICS A61K031-4439; A61K031-426; A61K031-175; A61K031-16

INCL 514019000; 514342000; 514369000; 514592000; 514629000

CC 63-6 (Pharmaceuticals)

ST pharmaceutical antidiabetic renin inhibitor; aliskiren renin inhibitor pharmaceutical

IT Antidiabetic agents

Diabetes mellitus

Drug delivery systems

(pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT Sulfonylureas

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT Drug delivery systems

(tablets, coated; pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT Drug delivery systems

(tablets; pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT 9015-94-5, Renin, biological studies 54249-88-6, DPP-IV

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitor; pharmaceutical compns. containing renin
 inhibitor and antidiabetics)

IT 89750-14-1, GLP1

RL: BSU (Biological study, unclassified); BIOL (Biological study) (pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT 657-24-9, Metformin 105816-04-4, Nateglinide 111025-46-8, Pioglitazone 122320-73-4, Rosiglitazone 135062-02-1, Repaglinide 145375-43-5, Mitiglinide 173334-57-1, Aliskiren 173334-58-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing renin inhibitor and antidiabetics)

IT 9004-10-8, Insulin, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (secretion enhancer; pharmaceutical compns. containing renin inhibitor and antidiabetics)

L61 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:293592 HCAPLUS Full-text

DOCUMENT NUMBER:

136:325420

TITLE:

Drugs for diabetes, especially type 2,

comprising an antiinflammatory or analgesic drug, selected bivalent linkers, and a nitrate ester

INVENTOR(S): Del Soldato, Piero

PATENT ASSIGNEE(S):

Nicox S.A., Fr.

SOURCE:

PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2002030867	A2 20020418	WO 2001-EP11665	20011009 <
WO 2002030867	A3 20020725		
W: AE, AG, AL,	AU, BA, BB, BG,	BR, BZ, CA, CN, CR, CU,	CZ, DM, DZ,
EE, GD, GE,	HR, HU, ID, IL,	IN, IS, JP, KP, KR, LC,	LK, LR, LT,
LV, MA, MG,	MK, MN, MX, NO,	NZ, PL, RO, SG, SI, SK,	TR, TT, UA,
US, UZ, VN,	YU, ZA, AM, AZ,	BY, KG, KZ, MD, RU, TJ,	TM
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZW, AT,	BE, CH, CY,
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL, PT,	SE, TR, BF,
BJ, CF, CG,	CI, CM, GA, GN,	GQ, GW, ML, MR, NE, SN,	TD, TG
IT 2000MI2201	A1 20020412	IT 2000-MI2201	20001012 <
IT 1319201	B1 20030926		•
CA 2425655	A1 20020418	CA 2001-2425655	20011009 <
AU 200214006	A 20020422	AU 2002-14006	20011009 <
EP 1324974	A2 20030709	EP 2001-982414	20011009 <
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004511456 \mathbf{T} 20040415 JP 2002-534256 20011009 <--US 2004023890 A1 20040205 US 2003-398511 20030411 <--PRIORITY APPLN. INFO.: IT 2000-MI2201 Α 20001012 <--20011009 <--WO 2001-EP11665 ,W

OTHER SOURCE(S): MARPAT 136:325420

ED Entered STN: 19 Apr 2002

GI

AB Useful for the treatment of diabetes, particularly type 2, are compds. or salts thereof, having the following general formula A-(B)n-(C)m-NO2 [I; wherein A = radical of a drug having an antiinflammatory or analgesic activity; B = bivalent linking group wherein the precursor must meet certain tests described in the application; C = another defined bivalent linking group; n and m = 0 or 1, provided that (n + m) = 1 or 2]. I can be used in conjunction with other antidiabetic drugs, particularly insulin. I increase the direct antidiabetic effect of insulin, and reduce complications of diabetes, particularly vascular diseases, retinopathies, neuropathies, etc.. The values of n and m, i.e., the presence or absence of bivalent linkers B and C, alone or in combination, are based on performance of the precursors of the linkers in certain tests (no data). These tests are designated as follows: (test 4A): inhibition by > 15% of hemolysis of rat erythrocytes induced by cumene hydroperoxide; (test 5): inhibition of radical production by ≥ 50% in the oxidative degradation of . desoxyribose in aqueous Fe2+(NH4)2(SO4)2/thiobarbituric acid solution; and (test 4): inhibition by \geq 50% of DPPH-induced radical production in MeOH solution For instance, acetylsalicylic acid chloride was esterified with 3-(hydroxymethyl)phenol (80%), followed by nitation of the resultant Ph ester with HNO3/H2SO4 (82%), to give invention compound II, which is thus the 3-(nitrooxymethyl)phenyl ester of aspirin. When tested on isolated aorta from insulin-resistant rats, compound II at a concentration of 10-4 M gave 70% vasorelaxation, relative to non-insulin-resistant controls. This effect was unchanged by the presence or absence of the irreversible NO synthetase inhibitor LNNA. In contrast, both Na nitroprussiate and the indomethacin analog of II, known NO donors, were inactive, and the antidiabetic drug metformin was inactivated by LNNA.

IC ICM C07C203-04

ICS A61K031-04; A61K031-621; A61P003-10

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
 Section cross-reference(s): 1

IT Diabetes mellitus

(non-insulin-dependent, treatment; preparation of antidiabetic agents comprising antiinflammatory or analgesic drugs, selected bivalent linkers, and nitrate esters)

IT 50-81-7, Ascorbic acid, properties 52-67-5, Penicillamine 52-90-4, Cysteine, properties 56-69-9, 5-Hydroxytryptophan 56-84-8, Aspartic acid, properties 57-50-1, Saccharose, properties 60-00-4, Edetic acid, properties 60-24-2, 2-Mercaptoethanol 70-18-8, Glutathione, properties

```
71-00-1, Histidine, properties 77-92-9, Citric acid, properties
     80-72-8, Reductic acid 89-65-6, Isoascorbic acid 105-59-9,
     N-Methyldiethanolamine 110-15-6, Succinic acid, properties
     Fumaric acid, properties 110-63-4, 1,4-Butanediol, properties
     111-17-1, 3,3'-Thiodipropionic acid 111-46-6, Diethylene glycol,
                111-48-8, Thiodiethylene glycol 117-39-5, Quercetin
     properties
                          121-34-6, Vanillic acid 121-79-9, Propyl gallate
     120-05-8, Sulfuretin
     123-31-9, Hydroquinone, properties
                                        141-90-2, 2-Thiouracil
     Gallic acid, properties 154-23-4, Catechin 303-45-7, Gossypol
     305-84-0, L-Carnosine 331-39-5, Caffeic acid
                                                     444-27-9,
     4-Thiazolidinecarboxylic acid 458-35-5, Coniferyl alcohol
                                                                  490-79-9,
     Gentisic acid
                    500-38-9, Nordihydroguaiaretic acid
                                                         501-94-0
                                                                     520-18-3,
                 520-26-3, Hesperidin
     Kaempferol
                                       526-84-1, Dihydroxymaleic acid
     533-73-3, Hydroxyhydroquinone 584-85-0, Anserine
                                                         591-81-1,
     4-Hydroxybutyric acid 635-65-4, Bilirubin, properties
                                                              824-46-4,
     Methoxyhydroquinone 1005-72-7, Tetrahydropyran-2,6-dimethanol
     1077-28-7, Thioctic acid
                              1191-25-9, 6-Hydroxyhexanoic acid
                                             3614-08-2, Selenocysteine
     Vitamin E
                1464-42-2, Selenomethionine
     3690-05-9, p-Cumaric alcohol
                                   6007-86-9, Thiophene-2,5-dimethanol
     7400-08-0, p-Cumaric acid
                               15537-71-0, N-Acetylpenicillamine
     19750-45-9, 2-Oxo-4-thiazolidinecarboxylic acid
                                                      54120-69-3,
     1,4-Dioxan-2,6-dimethanol
                                54573-75-0, 1\alpha-OH-Vitamin D2
     55721-11-4, Secalciferol 63147-28-4, 3,5-Di-tert-butyl-4-hydroxybenzyl
     thioglycolate 83805-11-2, Flocalcitriol 92614-59-0, Glutathione ethyl
            97451-46-2, Glutathione isopropyl ester 103909-75-7,
     22-Oxacalcitriol 148258-92-8 326850-58-2, Tetrahydrothiopyran-2,6-
                326850-59-3, 1,4-Dithiane-2,6-dimethanol 326850-60-6,
     dimethanol
                                326850-61-7, Thiazole-2,5-dimethanol
     Cyclohexene-1,5-dimethanol
     326850-62-8, Oxazole-2,5-dimethanol
                                          414355-30-9, 4H-Pyran-2,6-dimethanol
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (bivalent linker precursor; preparation of antidiabetic agents comprising
       antiinflammatory or analgesic drugs, selected bivalent linkers, and
       nitrate esters)
     50-78-2DP, Acetylsalicylic acid, nitroxyl-containing derivs.
                                                                   61-68-7DP,
     Mefenamic acid, nitroxyl-containing derivs. 65-45-2DP, Salicylamide,
     nitroxyl-containing derivs. 69-72-7DP, Salicylic acid, nitroxyl-containing
              89-45-2DP, Salicylsulfuric acid, nitroxyl-containing derivs.
     118-55-8DP, Phenyl salicylate, nitroxyl-containing derivs. 118-57-0DP,
     Acetaminosalol, nitroxyl-containing derivs. 487-48-9DP, Salacetamide,
    nitroxyl-containing derivs. 530-75-6DP, Acetylsalicylsalicylic acid,
     nitroxyl-containing derivs. 530-78-9DP, Flufenamic acid, nitroxyl-containing
              552-94-3DP, Salsalate, nitroxyl-containing derivs.
                                                                   644-62-2DP.
    Meclofenamic acid, nitroxyl-containing derivs.
                                                    695-34-1DP,
     2-Amino-4-picoline, nitroxyl-containing derivs.
                                                     1503-53-3DP,
     5-Bromosalicylic acid acetate, nitroxyl-containing derivs.
                                                                 4394-00-7DP,
    Niflumic acid, nitroxyl-containing derivs. 5104-49-4DP, Flurbiprofen,
    nitroxyl-containing derivs. 13710-19-5DP, Tolfenamic acid, nitroxyl-
containing
              15687-27-1DP, Ibuprofen, nitroxyl-containing derivs.
    derivs.
                                                                     38194-50-2DP,
     Sulindac, nitroxyl-containing derivs. 38677-85-9DP, Flunixin,
                                  87893-55-8DP, 15-Deoxy-\Delta 12, 14-
    nitroxyl-containing derivs.
    prostaglandin, nitroxyl-containing derivs. 105816-04-4DP, Nateglinide,
    nitroxyl-containing derivs.
                                  135062-02-1DP, Repaglinide, nitroxyl-containing
    derivs. 145375-43-5DP, Mitiglinide, nitroxyl-containing
              177785-17-0DP, (S)-4-[2-(2-Benzoxazolylmethylamino)ethoxy]-
    derivs.
    \alpha-(2,2,2-trifluoroethoxy) benzenepropanoic acid, nitroxyl-containing
    derivs. 195137-72-5DP, JTT-608, nitroxyl-containing derivs.
    N-(2-Benzoylphenyl)-O-[2-(methyl-2-pyridinylamino)ethyl]-L-tyrosine,
```

IT

nitroxyl-containing derivs. 196808-45-4DP, Farglitazar, nitroxyl-containing 236111-01-6DP, (S)-4-[2-(2-Benzoxazolylmethylamino)ethoxy]a-ethoxybenzenepropanoic acid, nitroxyl-containing derivs. 267412-60-2DP, (2S,5S)-N,N-Dibenzyl-3-[4-(4-Carboxyphenyl)butyl]-2-heptyl-4-oxothiazolidine-5-acetamide, nitroxyl-containing derivs. 403731-62-4DP, Rosiglitazone nitrate, nitroxyl-containing derivs. 414355-31-0DP, Pioglitazone nitrate, nitroxyl-containing derivs. RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidates; preparation of antidiabetic agents comprising antiinflammatory or analgesic drugs, selected bivalent linkers, and nitrate esters)

L61 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER:

136:205430

DOCUMENT NUMBER:

2002:157602 HCAPLUS Full-text

TITLE:

Pharmaceutical compositions containing AT-receptor

antagonist or insulin secretion enhancers

INVENTOR (S):

Allison, Malcolm; Gatlin, Marjorie Regan

PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen

Verwaltungsgesellschaft m.b.H.; Novartis Pharma. GmbH

SOURCE:

PCT Int. Appl., 24 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.									APPLICATION NO. DATE										
		2002015933												20010820						
	WO	2002015933				A 3		2003	0814											
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	BZ,	CA,	CH,	CN,		
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,		
			LS;	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,		
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,		
			US,	UZ,	VN,	YU,	ZA,	ZW												
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AM,	ΑZ,	BY,	KG,		
			KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,		
			ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,		
			GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG										
	AU 2001087698					A 5		20020304 AU 2001-87698 20						0010	010820					
	EP 1351683			A2		2003	1015		EP 2	001-	9672	89		20010820						
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
				-	•	•	•	•	MK,											
	JP 2004514654					T		2004	0520		JP 2	002-	5208	54		20010820				
	US 2004034065																			
	US 2006089389						1 20060427 US 2005-295928 20051						0051	207						
	US 2006281790						20061214				US 2006-508353					20060823				
PRIOR	PRIORITY APPLN. INFO.:									1	US 2	000-	6436	41	1	A 2	0000	822		
										1	US 2	000-3	3275	53P		P 2	0000	822		
										1	WO 2	NO 2001-EP9587				W 20010820				
										1	US 2	003-3	3623	40]	B1 2	0030	616		
										1	US 2	005-2	2959:	28]	B1 2	0051	207		

ED Entered STN: 01 Mar 2002

AB A pharmaceutical composition comprises as active ingredients an AT1-receptor antagonist or a salt, an insulin secretion enhancer or a its salt or an insulin sensitizer or its salt. Thus, tablets contained Starlix DS 60,

lactose monohydrate 141.5, microcryst. cellulose 71, Povidone-K30 12, and Croscarmellose sodium 18.4, colloidal SiO2 6.4, Mg stearate 5.7, and Opadry 9 mq.

IC ICM A61K045-00

CC 63-6 (Pharmaceuticals)

Angiotensin receptor antagonists

Antianginal agents Antidiabetic agents Antihypertensives Antiobesity agents Cardiovascular agents

Cataract

Connective tissue, disease

Hyperglycemia

Hypertriglyceridemia Hypolipemic agents Skin, disease

> (pharmaceutical compns. containing AT-receptor antagonist or insulin secretion enhancers)

ΙT 339-43-5, Carbutamide 451-71-8, Glyhexamide 535-65-9, Glybuthiazole 631-27-6, Glyclopyramide 664-95-9, Tolcyclamide 968-81-0, 1156-19-0, Tolazamide Acetohexamide 1228-19-9, Glypinamide

1492-02-0, Glybuzole 3149-00-6, Phenbutamide 3459-20-9, Glymidine 4618-41-1, 1-Butyl-3-metanilylurea 9004-10-8, Insulin, biological

21187-98-4, Gliclazide 10238-21-8, Glibenclamide 25046-79-1,

Glisoxepid 26944-48-9, Glibornuride 29094-61-9, Glipizide 33342-05-1, Gliquidone 93479-97-1, Glimepiride 105816-04-4, 114798-26-4, Losartan 133040-01-4, Eprosartan Nateglinide

135062-02-1, Repaglinide 137862-53-4, Valsartan 138402-11-6,

Irbesartan 139481-59-7, Candesartan 144689-63-4, Olmesartan medoxomil

144701-48-4, Telmisartan 145375-43-5, Mitiglinide

145733-36-4, Tasosartan

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing AT-receptor antagonist or insulin secretion enhancers)

L61 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN 2002:157564 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

136:205424

TITLE:

SOURCE:

Combinations of insulin secretion enhancer, HMG-CoA

reductase inhibitors and

acetylcholinesterase inhibitors

INVENTOR (S):

Allison, Malcolm; Gatlin, Marjorie Regan Novartis A.-G., Switz.; Novartis-Erfindungen

PATENT ASSIGNEE(S):

Verwaltungsgesellschaft m.b.H.; Novartis Pharma GmbH

PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ ----_____ _____ _____ WO 2002015892 A2 20020228 WO 2001-EP9586 20010820 <--**A3** WO 2002015892 20030904 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

```
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002014952
                          A5
                                20020304
                                            AU 2002-14952
                                                                    20010820 <--
     EP 1359907
                                20031112
                          A2
                                            EP 2001-983442
                                                                    20010820 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004519424
                          Т
                                20040702
                                            JP 2002-520813
                                                                    20010820 <--
                                                                   20030618 <--
     US 2004087630
                          A1
                                20040506
                                            US 2003-362341
PRIORITY APPLN. INFO.:
                                            US 2000-643642
                                                                A 20000822 <--
                                            WO 2001-EP9586
                                                                W 20010820 <--
ED
     Entered STN: 01 Mar 2002
AB
     The present invention relates to a combination, especially a pharmaceutical
     composition, comprising (a) an insulin secretion enhancer or a
     pharmaceutically acceptable salt thereof and (b) at least one of the active
     ingredients selected from the group consisting of (i) HMG-Co-A reductase
     inhibitors or a pharmaceutically acceptable salt thereof; and (ii) ACE
     inhibitors or a pharmaceutically acceptable salt thereof; and, in case of a
     pharmaceutical composition, a pharmaceutically acceptable carrier.
     Formulations were given as examples, e.g., tablets containing nateglinide.
IC
     ICM A61K031-00
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1
ST
     insulin secretion enhancer pharmaceutical combination; HMG CoA
     reductase inhibitor pharmaceutical combination;
     acetylcholinesterase inhibitor pharmaceutical combination
IT
     Antidiabetic agents
     Antihypertensives
     Antiobesity agents
     Connective tissue, disease
     Eye, disease
    Hypolipemic agents
     Skin, disease
        (combinations of insulin secretion enhancer, HMG-CoA reductase
        inhibitors and acetylcholinesterase inhibitors)
IT
    Nerve, disease
        (diabetic neuropathy; combinations of insulin secretion
        enhancer, HMG-CoA reductase inhibitors and
        acetylcholinesterase inhibitors)
IT
    Eye, disease
        (diabetic retinopathy; combinations of insulin secretion
        enhancer, HMG-CoA reductase inhibitors and
        acetylcholinesterase inhibitors)
IT
    Heart, disease
        (failure; combinations of insulin secretion enhancer, HMG-CoA
        reductase inhibitors and acetylcholinesterase
        inhibitors)
IT
    Kidney, disease
        (glomerulosclerosis; combinations of insulin secretion enhancer,
       HMG-CoA reductase inhibitors and
       acetylcholinesterase inhibitors)
TT
    Sexual disorders
        (impotence; combinations of insulin secretion enhancer, HMG-CoA
        reductase inhibitors and acetylcholinesterase
        inhibitors)
IT
    Eye, disease
        (macula, degeneration; combinations of insulin secretion enhancer,
```

HMG-CoA reductase inhibitors and acetylcholinesterase inhibitors)

IT Inflammation

Intestine, disease

(ulcerative colitis; combinations of insulin secretion enhancer, HMG-CoA reductase inhibitors and acetylcholinesterase inhibitors)

IT 9004-10-8, Insulin, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (combinations of insulin secretion enhancer, HMG-CoA reductase inhibitors and acetylcholinesterase inhibitors)

94-20-2, Chlorpropamide 339-43-5, Carbutamide IT 64-77-7, Tolbutamide 339-44-6, Glymidine 451-71-8, Glyhexamide 535-65-9, Glybuthiazole 631-27-6, Glyclopyramide 664-95-9, Tolcyclamide 968-81-0, Acetohexamide 1156-19-0, Tolazamide 1228-19-9, Glypinamide 1492-02-0, Glybuzole 3149-00-6, Phenbutamide 4618-41-1, 1-Butyl-3-metanilylurea 10238-21-8, Glibenclamide 21187-98-4, 25046-79-1, Glisoxepid 26944-48-9, Glibornuride Gliclazide 29094-61-9, Glipizide 33342-05-1, Gliquidone 62571-86-2, Captopril 74258-86-9, Alacepril 75330-75-5, Lovastatin 75847-73-3, Enalapril 76420-72-9, Enalaprilat 76547-98-3, Lisinopril 79902-63-9, Simvastatin 81093-37-0, Pravastatin 82834-16-0, Perindopril 83435-66-9, Delapril 83647-97-6, Spirapril 85441-61-8, Quinapril 85856-54-8, Moveltipril 86541-75-5, Benazepril 86541-78-8, Benazeprilat 87333-19-5, Ramipril 87679-37-6, Trandolapril 88768-40-5, Cilazapril 89371-37-9, Imidapril 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 98048-97-6, Fosinopril 105816-04-4, Nateglinide 111223-26-8, Ceronapril 111902-57-9, Temocapril 134523-00-5, Atorvastatin 135062-02-1, Repaglinide **145375-43-5**, **Mitiglinide** 145599-86-6, Cerivastatin 147511-69-1, Pitavastatin 287714-41-4, Rosuvastatin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combinations of insulin secretion enhancer, HMG-CoA reductase inhibitors and acetylcholinesterase inhibitors)

IT 9000-81-1, Acetylcholinesterase 9028-35-7, HMG-CoA reductase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; combinations of insulin secretion enhancer,
 HMG-CoA reductase inhibitors and
 acetylcholinesterase inhibitors)

L61 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:51257 HCAPLUS Full-text

DOCUMENT NUMBER: 136:123595

TITLE: A combination of phosphonate or phosphorodiamidate

FBPase inhibitors and antidiabetic agents

useful for the treatment of diabetes

INVENTOR(S): Van Poelje, Paul D.; Erion, Mark D.; Fujiwara,

Toshihiko

PATENT ASSIGNEE(S): Metabasis Therapeutics, Inc., USA; Sankyo Company,

Ltd.

SOURCE: PCT Int. Appl., 392 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
WO 2002003978	A2	20020117	WO 2001-US21557	20010705 <			
WO 2002003978	A3	20031016					

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GW, ML, MR, NE, SN, TD, TG
     CA 2412142
                          A1
                                 20020117
                                             CA 2001-2412142
                                                                     20010705 <--
     AU 200173271
                                             AU 2001-73271
                                                                     20010705 <--
                          Α
                                 20020121
                          B2
                                 20060105
     AU 2001273271
     US 2003073728
                          A1
                                 20030417
                                             US 2001-900364
                                                                     20010705 <--
     HU 200301830
                          A2
                                 20031128
                                             HU 2003-1830
                                                                     20010705 <--
                                                                     20010705 <--
     BR 2001012212
                          Α
                                 20031230
                                             BR 2001-12212
     EP 1372660
                          A2
                                 20040102
                                             EP 2001-952530
                                                                     20010705 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004508297
                          Т
                                 20040318
                                             JP 2002-508433
                                                                     20010705 <--
     CN 1599612
                          Α
                                 20050323
                                             CN 2001-814924
                                                                     20010705 <--
     NZ 523227
                                 20050429
                                             NZ 2001-523227
                                                                     20010705 <--
                          Α
     IN 2002MN01873
                          Α
                                 20050204
                                             IN 2002-MN1873
                                                                     20021224 <--
     ZA 2003000044
                          Α
                                 20040506
                                             ZA 2003-44
                                                                     20030102 <--
     NO 2003000034
                          Α
                                 20030305
                                             NO 2003-34
                                                                     20030103 <--
     AU 2006201410
                          A1
                                 20060427
                                             AU 2006-201410
                                                                     20060404 <--
PRIORITY APPLN. INFO.:
                                             US 2000-216531P
                                                                     20000706 <--
                                                                     20010705 <--
                                             US 2001-900364
                                                                  Α
                                             US 2000-215126P
                                                                  р
                                                                     20000629 <--
                                             AU 2001-73271
                                                                  A3 20010705 <--
                                             WO 2001-US21557
                                                                  W 20010705 <--
```

OTHER SOURCE(S): MARPAT 136:123595

ED Entered STN: 18 Jan 2002

GI

AB A combination therapy of at least one FBPase inhibitor ((R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M; e.g. 2-amino-5-propylthio-4-(5-phosphono-2-furanyl)thiazole monohydrobromide and 2-amino-5-isobutyl-4-[2-[N,N'-bis[(S)-1-(ethoxycarbonyl)ethyl]phosphonodiamido]-5-furanyl]thiazole (shown as I)) and at least one other antidiabetic agent (insulin secretagogue; e.g. glyburide, a sulfonylurea) is disclosed. (R1Y)2P(O)M and R14C(O)(CR12R13)nN(R18)P(O)(NR15R16)M are converted in vivo or in vitro to MPO32-, which inhibit FBPase; the substituents are defined in the claims. General methods and about 15 specific example prepns. of the phosphorus

compds. are included but no methods of preparation are claimed. In the biol. examples, data is presented for the following for selected phosphorus compds. and other materials: inhibition of human liver FBPase, inhibition of rat liver and mouse liver FBPase, inhibition of gluconeogenesis by an FBPase inhibitor in rat hepatocytes, inhibition of glucose production and elevation of fructose-1,6-bisphosphate levels in rat hepatocytes treated with FBPase inhibitors, anal. of hepatic and plasma drug metabolite levels, blood glucose, and hepatic fructose 1,6-bisphosphate levels after administration of compound A (shown as II) p.o. to normal fasted rats, anal. of hepatic and plasma drug levels after administration of compds. i.p. to normal fasted rats, oral bioavailability determination of two compds. and oral glucose lowering activity of two compds. For insulin secretagogues: insulin release from pancreatic islets, glucose lowering in the fasted rat, i.v. glucose tolerance in the fasted rat, oral glucose tolerance in the Zucker diabetic fatty rat, insulin secretion in the rat, inhibition of KATP-channels in mouse pancreatic beta-cells, and sulfonylurea receptor binding. Also included are: inhibition of dipeptidyl peptidase IV (DPP-IV inhibitors), alpha-glucosidase assay, glycogen phosphorylase assay, assay of glucose 6-phosphatase inhibitors, glucagon antagonist assay, amylin agonist assay, fatty acid oxidation inhibitor assay, glucose lowering in the db/db mouse (FBPase inhibitor), glucose lowering in the ZDF rat, acute combination treatment of an insulin secretagoque and an FBPase inhibitor in the ZDF rat, chronic combination treatment of an insulin secretagoque and an FBPase inhibitor in the ZDF rat, acute combination treatment of insulin and an FBPase inhibitor in db/db mice, beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db mice, and beneficial effect of chronic combination treatment of insulin and an FBPase inhibitor in db/db Mice. Also included are: acute combination treatment of insulin and an FBPase inhibitor in the Goto-Kakizaki rat, acute combination treatment of a biguanide and an FBPase inhibitor in db/db mice, acute combination treatment of an alpha glucosidase inhibitor and an FBPase inhibitor in Goto-Kakizaki rats, acute combination treatment of a glycogen phosphorylase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of a glucose-6-phosphatase inhibitor and an FBPase inhibitor in db/db or ob/ob mice, acute combination treatment of an FBPase inhibitor and an amylin agonist, chronic combination treatment of a fatty acid oxidation inhibitor and an FBPase inhibitor in the streptozotocin-induced diabetic rat.

- IC ICM A61K031-00
- CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 27, 28, 29

- ST antidiabetic agent phosphonate phosphorodiamidate FBPase inhibitor diabetes treatment; insulin secretagogue phosphonate phosphorodiamidate FBPase inhibitor diabetes treatment
- IT Potassium channel

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ATP-sensitive; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Glucagon-like peptide-1 receptors

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(agonists; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

- IT Sulfonylurea receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (binding; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)
- IT Antiobesity agents

(combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful as)

IT Antidiabetic agents

B cell (lymphocyte)

Drug bioavailability

Human

Pancreatic islet of Langerhans

(combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Antioxidants

(fatty acid; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Liver

(fructose bisphosphatase of; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Liver

(hepatocyte, fructose bisphosphatase of; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Gluconeogenesis

(inhibitors; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Fatty acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (inhibitors; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Sulfonylureas

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(insulin secretagogues; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Drug delivery systems

(oral; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Organic compounds, biological studies

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(phosphorus-containing; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT Drug delivery systems

(prodrugs; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT 106602-62-4, Amylin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (agonists; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)

IT 151126-32-8, Pramlintide

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

```
(amylin agonist; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)
```

- IT 9007-92-5, Glucagon, biological studies
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (antagonists; combination of phosphonate or phosphorodiamidate FBPase
 - inhibitors and antidiabetic agents useful for treatment of
 diabetes)
- IT 50-99-7, D-Glucose, biological studies
- RL: BSU (Biological study, unclassified); BIOL (Biological study) (blood; combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of diabetes)
- IT 213125-12-3P, 5-Diethylphosphono-2-(4-methyl-1-oxopentyl)furan RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (combination of phosphonate or phosphorodiamidate FBPase inhibitors and antidiabetic agents useful for treatment of
- diabetes) IT 261365-06-4P, 5-Diethylphosphono-2-acetylfuran 261365-08-6P, 5-Diethylphosphono-2-(1-oxobutyl) furan 261365-11-1P, 2-Amino-5-isobutyl-4-[5-phosphono-2-furanyl]thiazole 261365-17-7P 261365-19-9P, 2-Methyl-4-(5-phosphono-2-furanyl)thiazole 261365-23-5P, 2-Isopropyl-4-(5-phosphono-2-furanyl)thiazole 261365-25-7P, 5-Isobutyl-4-(5-phosphono-2-furanyl)thiazole 261365-27-9P, 2-Aminothiocarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-31-5P 261365-33-7P, 2-(2-Thienyl)-5-isobutyl-4-(5-phosphono-2-furanyl)thiazole 261365-37-1P, 2-Acetamido-5-isobutyl-4-(5-phosphono-2-261365-36-0P 261365-38-2P, 2-Amino-4-(5-phosphono-2-furanyl)thiazole furanyl)thiazole 261365-40-6P, 2-Methylamino-5-isobutyl-4-(5-phosphono-2-furanyl)thiazole 261365-48-4P 261365-51-9P 261365-55-3P 2-Ethoxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-58-6P, 2-Amino-5-ethyl-4-(5-phosphono-2-furanyl)thiazole 261365-60-0P, 2-Cyanomethyl-4-(5-phosphono-2-furanyl)thiazole 261365-62-2P 261365-63-3P, 2-Amino-5-propyl-4-(5-phosphono-2-furanyl)thiazole 261365-65-5P 261365-66-6P, 2-Amino-5-methylthio-4-(5-phosphono-2furanyl)thiazole 261365-67-7P, 2-Amino-5-cyclopropyl-4-(5-phosphono-2furanyl) thiazole monohydrobromide 261365-68-8P, 2-Amino-5-cyclopropyl-4-261365-70-2P, 2-Amino-5-(5-phosphono-2-furanyl)thiazole benzyloxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-72-4P 261365-73-5P, 2-Amino-5-[N,N-dimethylaminomethyl]-4-(5-phosphono-2furanyl)thiazole dihydrobromide 261365-75-7P, 2-Amino-5-methoxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-78-0P, 2-Amino-5propyloxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 2-Amino-5-benzyl-4-(5-phosphono-2-furanyl)thiazole 261365-80-4P, 2-Amino-5-[N,N-diethylaminomethyl]-4-(5-phosphono-2-furanyl)thiazole 261365-83-7P, 2-Amino-5-(N, N-dimethylcarbamoyl)-4-(5dihydrobromide phosphono-2-furanyl)thiazole 261365-85-9P, 2-Amino-5-carboxy-4-(5phosphono-2-furanyl)thiazole 261365-86-0P, 2-Amino-5isopropyloxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-89-3P, 2-Methyl-5-cyclopropyl-4-(5-phosphono-2-furanyl)thiazole 261365-90-6P, 2-Methyl-5-ethoxycarbonyl-4-(5-phosphono-2-furanyl)thiazole 261365-92-8P, 2-[N-Acetylamino]-5-methoxymethyl-4-(5-phosphono-2-261365-95-1P, 2-Amino-5-cyclopropylmethoxycarbonyl-4-(5furanyl)thiazole phosphono-2-furanyl)thiazole 261365-98-4P, 2-[(N-Dansyl)amino]-5isobutyl-4-(5-phosphono-2-furanyl)thiazole 261365-99-5P, 2-Amino-5-(2,2,2-trifluoroethyl)-4-(5-phosphono-2-furanyl)thiazole 261366-00-1P, 2-Methyl-5-methylthio-4-(5-phosphono-2-furanyl)thiazole 261366-01-2P, 2-Amino-5-methylthio-4-(5-phosphono-2-furanyl)thiazole

```
261366-02-3P, 2-Cyano-5-ethyl-4-(5-phosphono-2-
monoammonium salt
furanyl)thiazole
                   261366-03-4P, 2-Amino-5-hydroxymethyl-4-(5-phosphono-2-
furanyl) thiazole
                   261366-05-6P, 2-Cyano-5-isobutyl-4-(5-phosphono-2-
furanyl)thiazole
                   261366-06-7P, 2-Amino-5-isopropylthio-4-(5-phosphono-2-
furanyl)thiazole monohydrobromide
                                    261366-07-8P, 2-Amino-5-phenylthio-4-
(5-phosphono-2-furanyl)thiazole
                                261366-08-9P, 2-Amino-5-tert-butylthio-4-
(5-phosphono-2-furanyl)thiazole
                                  261366-09-0P, 2-Amino-5-propylthio-4-(5-
phosphono-2-furanyl) thiazole monohydrobromide
                                                261366-11-4P,
2-Amino-5-ethylthio-4-(5-phosphono-2-furanyl)thiazole
                                                        261366-12-5P,
2-[N-(tert-Butyloxycarbonyl)amino]-5-methoxymethyl-4-(5-phosphono-2-
                   261366-13-6P, 2-Hydroxy-4-(5-phosphono-2-
furanyl)thiazole
furanyl) thiazole
                   261366-14-7P, 2-Hydroxy-5-ethyl-4-(5-phosphono-2-
furanyl)thiazole
                   261366-16-9P, 2-Hydroxy-5-isopropyl-4-(5-phosphono-2-
                   261366-17-0P, 2-Hydroxy-5-isobutyl-4-(5-phosphono-2-
furanyl)thiazole
furanyl)thiazole
                   261366-18-1P, 5-Ethoxycarbonyl-4-(5-phosphono-2-
                   261366-20-5P, 2-Amino-5-vinyl-4-(5-phosphono-2-
furanyl)thiazole
                   261366-21-6P, 2-Methylthio-5-isobutyl-4-(5-phosphono-2-
furanyl)thiazole
furanyl)thiazole
                   261366-24-9P, 2-Amino-5-isobutyl-4-(5-phosphono-2-
furanyl) selenazole
                     261366-26-1P, 2-Amino-5-methylthio-4-(5-phosphono-2-
furanyl) selenazole
                     261366-40-9P, 2-Amino-5-(2-furanyl)-4-(5-phosphono-2-
furanyl)thiazole
                   261366-65-8P, 2-Amino-5-isobutyl-4-(5-phosphono-2-
furanyl)oxazole
                  261366-66-9P, 2-Hydroxy-5-isobutyl-4-(5-phosphono-2-
                    261366-67-0P, 2-Methyl-4-isobutyl-5-(5-phosphono-2-
furanyl)imidazole
furanyl) oxazole monohydrobromide
                                   261366-68-1P, 2-Methyl-5-isobutyl-4-(5-
phosphono-2-furanyl)oxazole monohydrobromide
                                               261366-69-2P,
2-Methyl-5-isobutyl-4-(5-phosphono-2-furanyl)imidazole monohydrobromide
261366-71-6P, 2-Trifluoromethyl-4-(5-phosphono-2-furanyl)imidazole
261366-73-8P, 4,5-Dimethyl-1-isobutyl-2-(5-phosphono-2-furanyl)imidazole
261366-74-9P, 2-Amino-5-propyl-4-(5-phosphono-2-furanyl)oxazole
261366-75-0P, 2-Amino-5-ethyl-4-(5-phosphono-2-furanyl)oxazole
261366-76-1P, 2-Amino-5-methyl-4-(5-phosphono-2-furanyl)oxazole
261366-77-2P, 2-Amino-4-(5-phosphono-2-furanyl)oxazole
                                                         261366-78-3P,
2-Amino-5-isobutyl-4-(5-phosphono-2-furanyl)oxazole monohydrobromide
               261370-27-8P, 2-Methyl-5-isobutyl-4-(5-phosphorodiamido-2-
261370-26-7P
                   261370-29-0P, 2-Amino-5-methylthio-4-(5-
furanyl)thiazole
phosphorodiamido-2-furanyl)thiazole
                                      261370-30-3P, 2-Amino-5-isobutyl-4-
(5-phosphonomonoamido-2-furanyl) thiazole
                                           261370-31-4P,
2-Amino-5-isobutyl-4-(5-phosphorodiamido-2-furanyl)thiazole
261370-32-5P, 2-Amino-5-isobutyl-4-[5-(N,N'-diisobutylphosphorodiamido)-2-
furanyl]thiazole
                   261370-33-6P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(S)-1,3-
bis(ethoxycarbonyl)-1-propyl]phosphorodiamido]-2-furanyl]thiazole
261370-34-7P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis((S)-1-
benzyloxycarbonylethyl)phosphorodiamido]-2-furanyl]thiazole
                                                              261370-35-8P
261370-39-2P, 2-Amino-5-isobutyl-4-[5-[0-phenyl-N-((S)-1-
methoxycarbonylethyl)phosphonamido]-2-furanyl]thiazole
                                                        261370-44-9P,
2-Amino-5-isobutyl-4-[5-(O-phenylphosphonamido)-2-furanyl]thiazole
261370-46-1P, 2-Amino-5-isobutyl-4-(5-(0-phenyl-N-
ethoxycarbonylmethylphosphonamido) -2-furanyl)thiazole
                                                        261370-48-3P,
2-Amino-5-isobutyl-4-(5-(O-phenyl-N-isobutylphosphonamido)-2-
                   261370-50-7P, 2-Amino-5-isobutyl-4-[5-[0-phenyl-N-((S)-
furanyl)thiazole
1-ethoxycarbonyl-2-phenylethyl)phosphonamido]-2-furanyl]thiazole
261370-54-1P, 2-Amino-5-isobutyl-4-[5-[0-phenyl-N-[(S)-1,3-
bis (ethoxycarbonyl) propyl] phosphonamido] -2-furanyl] thiazole
261370-57-4P, 2-Amino-5-isobutyl-4-[5-[0-(3-chlorophenyl)-N-[(S)-1-
(methoxycarbonyl)ethyl]phosphonamido]-2-furanyl]thiazole
                                                           261370-60-9P,
2-Amino-5-isobutyl-4-[5-[0-phenyl-N-[1,1-bis(ethoxycarbonyl)methyl]phospho
namido]-2-furanyl]thiazole
                            261370-61-0P, 2-Amino-5-isobutyl-4-[5-[0-
phenyl-N-(1-morpholinyl)phosphonamido]-2-furanyl]thiazole
2-Amino-5-isobutyl-4-[5-[0-phenyl-N-[(S)-1-(benzyloxycarbonyl)ethyl]phosph
onamido]-2-furanyl]thiazole
                              261370-63-2P, 2-Amino-5-isobutyl-4-(5-(0-
```

```
phenyl-N-benzyloxycarbonylmethylphosphonamido) -2-furanyl)thiazole
261370-64-3P, 2-Amino-5-isobutyl-4-[5-[O-(4-methyloxyphenyl)-N-[(S)-1-
(methoxycarbonyl)ethyl]phosphonamido]-2-furanyl]thiazole
                                                           261370-68-7P
261370-69-8P
               261370-70-1P
                              261370-71-2P
                                             261370-73-4P
                                                            261370-74-5P
261370-76-7P, 2-Amino-5-methylthio-4-(5-(N-methyl-1-phenyl-1,3-
propylphosphonamido) -2-furanyl) thiazole
                                          261370-79-0P,
2-Amino-5-isobutyl-4-[5-[[3-(3,5-dichlorophenyl)-1,3-propyl]phosphonamido]-
2-furanyl]thiazole 261370-80-3P, 2-Amino-5-isobutyl-4-[5-(4,5-benzo-1-
oxo-1-phospha-2-oxa-6-azacyclohexan-1-yl)-2-furanyl]thiazole
261372-35-4P, 2-Amino-4-phosphonomethyloxy-6-bromobenzothiazole
261372-36-5P, 2-Amino-4-phosphonomethyloxybenzothiazole
                                                          261372-38-7P,
2-Amino-4-phosphonomethyloxy-6-bromo-7-chlorobenzothiazole
                                                              261372-39-8P,
2-Amino-4-phosphonomethoxy-6-bromo-7-methylbenzothiazole
                                                           261372-40-1P,
2-Amino-4-phosphonomethoxy-7-methylbenzothiazole
                                                   261372-42-3P,
2-Amino-4-phosphonomethoxy-7-chlorobenzothiazole
                                                   261372-64-9P,
2-Amino-7-ethyl-6-thiocyano-4-phosphonomethoxybenzothiazole
261373-40-4P, 2-Methyl-5-ethyl-4-(5-phosphono-2-furanyl)thiazole
280779-70-6P, 2-Phenyl-5-isobutyl-4-(5-phosphono-2-furanyl)thiazole
280779-71-7P, 2-Amino-5-isopropyl-4-(5-phosphono-2-furanyl)thiazole
280779-72-8P, 2-Amino-5-methanesulfinyl-4-(5-phosphono-2-furanyl)thiazole
280779-74-0P, 2-Amino-5-(4-morpholinyl) methyl-4-(5-phosphono-2-
furanyl) thiazole dihydrobromide
                                  280779-79-5P, 2-Amino-5-ethyl-4-(5-
                                 280779-91-1P, 2-Vinyl-5-isobutyl-4-(5-
phosphono-2-furanyl)selenazole
phosphono-2-furanyl) thiazole
                               280782-95-8P, 2-Amino-5-isobutyl-4-[5-[N,N'-
bis (benzyloxycarbonylmethyl) phosphonodiamido] furanyl] -2-thiazole
280782-96-9P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(R)-1-
(methoxycarbonyl)ethyl]phosphonodiamido]furanyl]-2-thiazole
280782-97-0P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(S)-1-
(ethoxycarbonyl)ethyl]phosphonodiamido]furanyl]-2-thiazole
                                                             280782-98-1P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis[(tert-butoxycarbonyl)methyl]phosphonodia
                           280782-99-2P, 2-Amino-5-isobutyl-4-[5-[N,N'-
mido]furanyl]-2-thiazole
bis[(ethoxycarbonyl)methyl]phosphonodiamido]furanyl]-2-thiazole
280783-00-8P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(1-methyl-1-
ethoxycarbonyl)ethyl]phosphonodiamido]furanyl]-2-thiazole
                                                            280783-01-9P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis(ethoxycarbonylmethyl)-N,N'-
dimethylphosphonodiamido] -2-furanyl] thiazole
                                               280783-02-0P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis((S)-1-benzyloxycarbonyl-2-
methylpropyl]phosphonodiamido]-2-furanyl]thiazole
2-Amino-5-isobutyl-4-[5-[[N,N'-bis((S)-1-methoxycarbonyl-3-
methyl)butyl]phosphonodiamido]-2-furanyl]thiazole
                                                    280783-04-2P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis[(R)-1-ethoxycarbonyl-2-
(benzylthio) ethyl] phosphonodiamido] -2-furanyl] thiazole
                                                         280783-06-4P,
2-Amino-5-propylthio-4-[5-[N,N'-bis[(S)-1-(ethoxycarbonyl)ethyl]phosphonod
iamido] - 2 - furanyl] thiazole
                             280783-07-5P, 2-Amino-5-isobutyl-4-[5-[N,N'-
bis[(S)-1-benzyloxycarbonyl-2-methylisobutyl]phosphonodiamido]-2-
furanyl]thiazole
                   280783-08-6P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(S)-1-
ethoxycarbonyl-3-methylbutyl]phosphonodiamido]-2-furanyl]thiazole
280783-09-7P, 2-Amino-5-isobutyl-4-[5-[N,N'-bis[(S)-1-ethoxycarbonyl-2-
methylpropyl]phosphonodiamido]-2-furanyl]thiazole
                                                    280783-10-0P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis[(S)-1-ethoxycarbonyl-2-
phenylethyl]phosphonodiamido]-2-furanyl]thiazole
                                                   280783-11-1P,
2-Amino-5-propylthio-4-[5-[N,N'-bis[(1-methyl-1-
ethoxycarbonylethyl]phosphonodiamido]-2-furanyl]]thiazole
                                                             280783-12-2P,
2-Amino-5-methylthio-4-[5-[N,N'-bis[1-methyl-1-
ethoxycarbonylethyl]phosphonodiamido]-2-furanyl]thiazole
                                                            280783-13-3P,
2-Amino-5-isobutyl-4-[5-[N-morpholino-N'-[1-methyl-1-
ethoxycarbonylethyl]phosphonodiamido]-2-furanyl]thiazole
                                                            280783-14-4P,
2-Amino-5-isobutyl-4-[5-[N-pyrrolidino-N'-[1-methyl-1-
ethoxycarbonylethyl]phosphonodiamido]-2-furanyl]thiazole
                                                            347870-21-7P,
2-Amino-5-isobutyl-4-[5-[N,N'-bis((S)-1-ethoxycarbonylpropyl)phosphorodiam
```

```
ido] -2-furanyl] thiazole
                           347870-33-1P, 2-Amino-5-(2-thienyl)-4-(5-
diethylphosphono-2-furanyl)thiazole 358670-36-7P, (5-(3,5-Dinitrophenyl)-
2-furanyl) phosphonic acid
                             358670-37-8P, (5-(2-Amino-3,5-dinitrophenyl)-2-
furanyl) phosphonic acid
                          358670-38-9P, (5-(5-Chloro-2-methoxyphenyl)-2-
                           358670-39-0P, (5-(2,5-Dichlorophenyl)-2-
furanyl) phosphonic acid
                           358670-40-3P, (5-(2-Methylsulfamoyl-5-
furanyl) phosphonic acid
 (trifluoromethyl)phenyl)-2-furanyl)phosphonic acid
                                                      358670-41-4P,
 (5-(5-Chloro-2-(methylsulfamoyl)phenyl)-2-furanyl)phosphonic acid
358670-42-5P, (5-(2-(Methylsulfamoyl)phenyl)-2-furanyl)phosphonic acid
358670-44-7P, (5-(2-Hydroxyphenyl)-2-furanyl)phosphonic acid
358670-45-8P, (5-(3,5-Dimethylphenyl)-2-furanyl)phosphonic acid
358670-46-9P, (5-(3-Bromophenyl)-2-furanyl)phosphonic acid
                                                              358670-47-0P,
 (5-(4-Aminophenyl)-2-furanyl)phosphonic acid
                                                358670-48-1P,
 (5-(4-Chloro-2,5-dimethoxyphenyl)-2-furanyl)phosphonic acid
358670-49-2P, (5-(2-((4-Chlorobenzyl)carbamoyl)phenyl)-2-
furanyl) phosphonic acid
                          358670-50-5P, (5-(2-((2-(4-
Chlorophenyl)ethyl)carbamoyl)phenyl)-2-furanyl)phosphonic acid
358670-51-6P, (5-(2-(Benzylsulfamoyl)phenyl)-2-furanyl)phosphonic acid
358670-52-7P, (5-(2-Sulfamoylphenyl)-2-furanyl)phosphonic acid
358670-53-8P, (5-Pentamethylphenyl-2-furanyl)phosphonic acid
358670-54-9P, (5-(2,3-Dicarboethoxyphenyl)-2-furanyl)phosphonic acid
358670-56-1P, (5-(4-Acetylamino-3-methylphenyl)-2-furanyl)phosphonic acid
358670-58-3P, (5-(2,4-Dichloro-6-methylphenyl)-2-furanyl)phosphonic acid
358670-59-4P, (5-(4-Hydroxy-2-carbomethoxyphenyl)-2-furanyl)phosphonic
acid
       358670-60-7P, (5-(2-Carbamoyl-4-methylphenyl)-2-furanyl)phosphonic
acid
       358670-61-8P, (5-(2-Ethoxycarbonyl-4-hydroxyphenyl)-2-
furanyl) phosphonic acid
                          358670-62-9P, (5-(4-Nitrophenyl)-2-
                          358670-63-0P, (5-(2-((2,4-
furanyl) phosphonic acid
Difluorophenyl)carbamoyl)phenyl)-2-furanyl)phosphonic acid
                                                              358670-64-1P,
 (5-(3,5-Dichlorophenyl)-2-furanyl)phosphonic acid
                                                     358670-65-2P,
                                                  358670-66-3P,
 (5-(3-Hydroxyphenyl)-2-furanyl)phosphonic acid
 (5-(5-Bromo-3-carboxyphenyl)-2-furanyl)phosphonic acid
                                                          358670-67-4P,
 (5-(5-Formyl-2,3-dimethoxyphenyl)-2-furanyl)phosphonic acid
358670-68-5P, (5-(2-Nitrophenyl)-2-furanyl)phosphonic acid
                                                              358670-69-6P,
 (5-(Biphenyl-2-yl)-2-furanyl)phosphonic acid
                                                358670-70-9P,
 (5-(2-(Carboethoxy)phenyl)-2-furanyl)phosphonic acid
                                                        358670-71-0P,
 (5-(4-Bromophenyl)-2-furanyl)phosphonic acid
                                                358670-72-1P,
 (5-(3-Propanoylphenyl)-2-furanyl)phosphonic acid
                                                    358670-73-2P,
 (5-(5-Cyano-2-methoxyphenyl)-2-furanyl)phosphonic acid
                                                          358670-74-3P,
 (5-(2-Ethylphenyl)-2-furanyl)phosphonic acid
                                                358670-75-4P,
 (5-(6-Methyl-2-nitrophenyl)-2-furanyl)phosphonic acid
                                                         358670-76-5P,
 (5-(4-(Acetylamino)phenyl)-2-furanyl)phosphonic acid
                                                        358670-77-6P,
 (5-(2,3,4,5-Tetramethylphenyl)-2-furanyl)phosphonic acid
                                                            358670-78-7P,
 (5-(Biphenyl-3-yl)-2-furanyl)phosphonic acid
                                                358670-79-8P,
 (5-(5-Chloro-2-sulfamoylphenyl)-2-furanyl)phosphonic acid
                                                             358670-80-1P,
 (5-(4-(((1-Pyrrolidinyl)acetyl)amino)phenyl)-2-furanyl)phosphonic acid
358670-81-2P, (5-(3,4-Dimethylphenyl)-2-furanyl)phosphonic acid
358670-82-3P, (5-(2,4-Dinitrophenyl)-2-furanyl)phosphonic acid
358670-83-4P, (5-(3-(Aminomethyl)phenyl)-2-furanyl)phosphonic acid
358670-84-5P, (5-(4-Amino-3-fluorophenyl)-2-furanyl)phosphonic acid
358670-85-6P, (5-(3-(Hydroxymethyl)phenyl)-2-furanyl)phosphonic acid
358670-86-7P, (5-(2-Bromophenyl)-2-furanyl)phosphonic acid
                                                              358670-87-8P,
 (5-(2-(2-Hydroxyethyl)phenyl)-2-furanyl)phosphonic acid
                                                           358670-88-9P,
 (5-(4-Carbamoylphenyl)-2-furanyl)phosphonic acid
                                                    358670-89-0P,
 (5-(4-Cyanophenyl)-2-furanyl)phosphonic acid
                                                358670-90-3P,
(5-(3-Cyanophenyl)-2-furanyl)phosphonic acid
                                                358670-91-4P,
 (5-(2-Cyanophenyl)-2-furanyl)phosphonic acid
                                                358670-92-5P,
 (5-(4-Amino-3-nitrophenyl)-2-furanyl)phosphonic acid
                                                        358670-93-6P,
(5-(2-Isopropylphenyl)-2-furanyl)phosphonic acid
                                                    358670-94-7P,
 (5-(6-Amino-2-chloro-3-pyridyl)-2-furanyl)phosphonic acid 358670-95-8P,
```

```
(5-(2-Amino-5-chlorophenyl)-2-furanyl)phosphonic acid
                                                        358670-96-9P,
(5-(3-Chloro-5-fluorophenyl)-2-furanyl)phosphonic acid 358670-97-0P,
(5-(2-Methyl-5-nitrophenyl)-2-furanyl)phosphonic acid
                                                        358670-98-1P,
(5-(5-Fluoro-3-nitrophenyl)-2-furanyl)phosphonic acid
                                                        358670-99-2P,
(5-(2-Amino-5-carbomethoxyphenyl)-2-furanyl)phosphonic acid
358671-00-8P, (5-(2-Methoxy-5-nitrophenyl)-2-furanyl)phosphonic acid
358671-01-9P, (5-(2-Chloro-5-(trifluoromethyl)phenyl)-2-furanyl)phosphonic.
       358671-02-0P, (5-(2,5-Bis(trifluoromethyl)phenyl)-2-
furanyl) phosphonic acid
                          358671-03-1P, (5-(4-Fluorophenyl)-2-
                          358671-04-2P, (5-(2,4-Dichlorophenyl)-2-
furanyl)phosphonic acid
                          358671-05-3P, (5-(3-Amino-5-carbomethoxyphenyl)-
furanyl) phosphonic acid
                            358671-06-4P, (5-(3-Amino-4-bromophenyl)-2-
2-furanyl)phosphonic acid
furanyl)phosphonic acid 358672-11-4P, (5-(4-Methyl-3-thienyl)-2-
furanyl) phosphonic acid
                          389057-32-3P, (5-(2-(Propylsulfamoyl)phenyl)-2-
furanyl) phosphonic acid
                          389057-53-8P
                                        389057-54-9P,
2-Amino-5-ethylthiocarbonyl-4-(5-phosphono-2-furanyl)thiazole
389057-55-0P, 2-Amino-5-methylthio-4-(5-phosphono-2-furanyl)thiazole
N, N-dicyclohexylammonium salt
                                389057-73-2P, 2-Amino-5-isobutyl-4-[5-[0-
(4-chlorophenyl) -N-((S)-1-methoxycarbonylethyl)phosphonamido]-2-
furanyl]thiazole
                   389057-74-3P, 2-Amino-5-isobutyl-4-[5-[0-phenyl-N-[2-...
(ethoxycarbonyl)propyl]phosphonamido]-2-furanyl]thiazole
                                                           389057-76-5P.
2-Amino-4-[[3-(3,5-dichlorophenyl)propane-1,3-diyl]phosphonomethoxy]-
6,7,8,9-tetrahydronaphtho[1,2-d]thiazole
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (combination of phosphonate or phosphorodiamidate FBPase
   inhibitors and antidiabetic agents useful for treatment of
   diabetes)
213124-93-7
              213199-10-1
                            213247-37-1
                                          240434-61-1
                                                        280783-15-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (combination of phosphonate or phosphorodiamidate FBPase
   inhibitors and antidiabetic agents useful for treatment of
   diabetes)
213190-65-9, Exendin
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (exendin and exendin agonists, insulin secretagogue; combination of
   phosphonate or phosphorodiamidate FBPase inhibitors and
   antidiabetic agents useful for treatment of diabetes)
9004-10-8, Insulin, biological studies
                                       116094-23-6, Insulin aspart
133107-64-9, Insulin lispro
                             160337-95-1, Insulin glargine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (in combination with phosphonate or phosphorodiamidate FBPase
   inhibitors useful for treatment of diabetes)
9001-39-2, Glucose-6-phosphatase
                                   9001-42-7, \alpha-Glucosidase
9001-52-9, Fructose bisphosphatase
                                     9035-74-9, Glycogen phosphorylase
54249-88-6, Dipeptidyl peptidase-IV
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (inhibitors; combination of phosphonate or phosphorodiamidate
   FBPase inhibitors and antidiabetic agents useful for
   treatment of diabetes)
64-77-7, Tolbutamide
                                                 114-86-3, Phenformin
                       94-20-2, Chlorpropamide
451-71-8, Glyhexamide
                        657-24-9, Metformin
                                              664-95-9, Tolcyclamide
692-13-7, Buformin
                     968-81-0, Acetohexamide
                                             1156-19-0, Tolazamide
3149-00-6, Phenbutamide 10238-21-8, Glyburide
                                                  21187-98-4, Gliclazide
25046-79-1, Glisoxepid
                         26944-48-9, Glibornuride
                                                    29094-61-9, Glipizide
33342-05-1, Gliquidone 56180-94-0, Acarbose 72432-03-2, Miglitol
```

IT

IT

IT

TT

TΤ

```
83480-29-9, Voglibose
                            93479-97-1, Glimepiride 105816-04-4, Nateglinide
    135062-02-1, Repaglinide 145375-43-5, Mitiglinide
    161748-40-9, BTS-67582
                             204656-20-2, NN 2211
                                                    247016-69-9, NVP-DPP728
    251572-86-8, P 32/98
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (insulin secretagogue; combination of phosphonate or phosphorodiamidate
       FBPase inhibitors and antidiabetic agents useful for
       treatment of diabetes)
    261373-15-3P, 2-Methyl-5-isobutyl-4-(5-phosphono-2-furanyl)thiazole
IT
    RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
    preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (intermediate; combination of phosphonate or phosphorodiamidate FBPase
       inhibitors and antidiabetic agents useful for treatment of
       diabetes)
    1738-68-7, Benzyl aminoacetate 358672-65-8, 6-Amino-2-chloro-3-
IT
    bromopyridine
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (intermediate; combination of phosphonate or phosphorodiamidate FBPase
       inhibitors and antidiabetic agents useful for treatment of
       diabetes)
IT
    36366-55-9P, Diethyl 2-furanylphosphonate
                                               78072-59-0P.
    2-(4-Methyl-1-oxopentyl) furan 82619-14-5P, Ethoxycarbonyloxymethyl
                            213124-94-8P, 5-Diethylphosphono-2-furaldehyde
             104208-14-2P
    261372-78-5P, 2-Bromo-5-isobutyl-4-(5-diethylphosphono-2-furanyl)thiazole
    261373-31-3P, 2-Diethylphosphonomethyloxy-5-bromonitrobenzene
    389057-77-6P, 4-Phosphonomethoxy-6,7,8,9-tetrahydronaphtho[1,2-d]thiazole
    dichloridate
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; combination of phosphonate or phosphorodiamidate FBPase
       inhibitors and antidiabetic agents useful for treatment of
IT
    953-18-4P, (R)-Ethyl 2-amino-3-(benzylthio)propanoate 2666-93-5P,
    L-Leucine methyl ester
                             2743-60-4P, L-Leucine ethyl ester 3081-24-1P,
    L-Phenylalanine ethyl ester
                                  13200-60-7P, N-Methylglycine ethyl ester
    17431-03-7P, L-Valine ethyl ester
                                       21760-98-5P, L-Valine benzyl ester
    154092-64-5P, (S)-Benzyl 2-amino-3,3-dimethylbutanoate
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (reactant; combination of phosphonate or phosphorodiamidate FBPase
       inhibitors and antidiabetic agents useful for treatment of
       diabetes)
IT
    78-81-9, Isobutylamine 88-67-5, 2-Iodobenzoic acid
                                                           98-01-1,
    2-Furaldehyde, reactions 109-80-8, 1,3-Propanedithiol
                                                              110-00-9, Furan
    110-70-3, N,N'-Dimethylethylenediamine 354-37-0, Trifluoroacetamidine
    431-03-8, 2,3-Butanedione
                               459-73-4, Glycine ethyl ester 533-58-4,
    2-Iodophenol
                   540-37-4, 4-Iodoaniline
                                            583-55-1, 2-Bromo-1-iodobenzene
    589-87-7, 1-Bromo-4-iodobenzene 591-18-4, 1-Bromo-3-iodobenzene
    609-73-4, 1-Iodo-2-nitrobenzene 622-50-4, 4-Iodoacetanilide
                          626-02-8, 3-Iodophenol
    4-Bromobenzonitrile
                                                   636-98-6,
                            646-07-1, 4-Methylpentanoic acid
    1-Iodo-4-nitrobenzene
                                                               672-57-1,
    2-Chloro-1-iodo-5-trifluoromethylbenzene 696-40-2, 3-Iodobenzylamine
    709-49-9, 1-Iodo-2,4-dinitrobenzene 814-49-3, Diethyl chlorophosphate
    873-38-1, 2-Bromo-4-chloroaniline 875-51-4, 4-Bromo-2-nitroaniline
    1074-16-4, 2-Bromophenethyl alcohol 1113-49-1, Ethyl
```

2-amino-2-methylpropanoate 1115-59-9, L-Alanine ethyl ester

hydrochloride 1459-01-4, 2-Iodoisopropylbenzene

```
4-Fluorophenylboronic acid
                             1817-73-8, 2-Bromo-4,6-dinitroaniline
2042-37-7, 2-Bromobenzonitrile 2113-51-1, 2-Iodobiphenyl
3-Bromobiphenyl
                2491-20-5, L-Alanine methyl ester hydrochloride
3032-81-3, 3,5-Dichloroiodobenzene 3082-75-5, L-Alanine ethyl ester
3819-88-3, 3-Nitro-5-fluoro-1-iodobenzene 3853-91-6,
1-Iodo-2,3,4,5,6-pentamethylbenzene 3956-07-8, 4-Iodobenzamide
5197-28-4, 2-Bromo-4-nitroanisole 5464-79-9, 2-Amino-4-
methoxybenzothiazole
                     6456-74-2 6937-34-4, 3-Iodophthalic acid
6948-30-7, 3-Bromo-4,5-dimethoxybenzaldehyde 6952-59-6,
3-Bromobenzonitrile 7051-34-5, Cyclopropanemethyl bromide
1-Bromo-2,5-bis(trifluoromethyl)benzene
                                         7745-93-9, 2-Bromo-4-
nitrotoluene
               13529-27-6, 2-Furaldehyde diethyl acetal
                                                          16450-41-2,
L-Glutamic acid diethyl ester 17831-01-5, L-Alanine benzyl ester
18282-40-1, 1-Ethyl-2-iodobenzene 19718-49-1, 2-Iodo-4-
carbomethoxyaniline 19829-31-3, 3'-Bromopropiophenone
                                                          21705-13-5,
                         22445-41-6, 5-Iodo-m-xylene 29632-74-4,
D-Alanine methyl ester
2-Fluoro-4-iodoaniline
                         29682-41-5, 2,5-Dichloro-1-iodobenzene
30318-99-1, 3-Bromo-4-methylthiophene
                                        31599-61-8, 3,4-
Dimethyliodobenzene 33863-76-2, 1-Bromo-3-chloro-5-fluorobenzene
41085-43-2, 2-Bromo-3-nitrotoluene 45644-21-1, 6-Amino-2-chloropyridine
52807-27-9, 4-Chloro-2-iodoanisole 53730-99-7, 2-Iodobenzenesulfonamide
54509-71-6, 2,3,4,5-Tetramethyliodobenzene
                                            57455-06-8, 3-Iodobenzyl
         57772-57-3, 5-Hydroxy-2-iodobenzoic acid
                                                     63980-69-8,
                                      68716-47-2, 2,4-
1-(2-Methoxy-5-chlorophenyl)thiourea
Dichlorophenylboronic acid 85006-23-1, 3-Aminophenylboronic acid
hydrochloride
                90064-46-3, 2,5-Dimethoxy-4-iodochlorobenzene
106938-62-9, Diethylphosphonomethyl trifluoromethylsulfonate
117324-09-1, 4-Iodo-2-methylacetanilide 117572-79-9,
3-Bromo-4-methoxybenzonitrile 118486-94-5, 2-Tributylstannylfuran
125259-03-2, N-Methyl-2-iodobenzenesulfonamide
                                                175277-97-1,
3,5-Dichloro-2-iodotoluene
                            188815-32-9, 3-Bromo-5-iodobenzoic acid
261369-11-3, 2-Amino-5-isobutyl-4-(5-diphenylphosphono-2-furanyl)thiazole
261372-76-3, 2-Amino-5-isobutyl-4-(5-diethylphosphono-2-furanyl)thiazole
261372-77-4, 2-Amino-5-bromo-4-(5-diethylphosphono-2-furanyl)thiazole
261373-39-1, 3-(3,5-Dichlorophenyl)-1,3-propanediol
                                                      270086-79-8,
                                                          271796-28-2,
N-(4-Iodophenyl)-2-(tetrahydro-1H-pyrrol-1-yl)acetamide
4-Chloro-2-iodobenzenesulfonamide 271796-61-3, N-Benzyl-2-
iodobenzenesulfonamide
                         271796-68-0, N-Propyl-4-chloro-2-
iodobenzenesulfonamide
                         273208-13-2, N-Methyl-2-iodo-4-
(trifluoromethyl)benzenesulfonamide 273208-16-5, N-Methyl-4-chloro-2-iodobenzenesulfonamide 304644-56-2, N-(4-Chlorobenzyl)-2-iodobenzamide
309253-36-9, 2-Iodo-5-methylbenzamide 347869-08-3, 5-Diethylphosphono-2-
(2-bromo-4-methyl-1-oxopentyl) furan 347869-10-7, 5-Diethylphosphono-2-
(bromoacetyl) furan 347869-19-6, Diethyl (5-iodo-2-furanyl) phosphonate
349110-34-5, N-(2,4-Difluorophenyl)-2-iodobenzamide
                                                      358672-63-6,
N-(4-Chlorophenethyl)-2-iodobenzamide
                                        358672-64-7, Methyl
                           380430-56-8, 3-Amino-5-
5-hydroxy-2-iodobenzoate
carbomethoxyphenylboronic acid
                                 389057-75-4, 2-Amino-4-phosphonomethoxy-
6,7,8,9-tetrahydronaphtho[1,2-d]thiazole
                                           389057-78-7,
4-Diphenylphosphonomethoxy-6,7,8,9-tetrahydronaphtho[1,2-d]thiazole
389057-79-8, 4-Phenylphosphonomethoxy-6,7,8,9-tetrahydronaphtho-[1,2-
            389057-80-1, 4-Phosphonomethoxy-6,7,8,9-tetrahydronaphtho[1,2-
d]thiazole
d]thiazole
RL: RCT (Reactant); RACT (Reactant or reagent)
   (reactant; combination of phosphonate or phosphorodiamidate FBPase
   inhibitors and antidiabetic agents useful for treatment of
   diabetes)
```

L61 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:743481 HCAPLUS Full-text

DOCUMENT NUMBER: 138:265470

TITLE: Study of the insulinotropic effect of the novel

antihyperglycemic agent KAD-1229 using HIT T15 cells,

a hamster's insulinoma cell line

AUTHOR(S): Ichikawa, Kiyoshi; Yamato, Tokuhisa; Tsuji, Atsutoshi;

Ojima, Kazuma; Kusama, Hiroshi; Kojima, Masami

CORPORATE SOURCE: Pharmacology Research, Research & Development, Kissei

Pharmaceutical Co., Ltd., Hotaka, Nagano, Japan

SOURCE: Arzneimittel-Forschung (2002), 52(8),

605-609

CODEN: ARZNAD; ISSN: 0004-4172

PUBLISHER: Editio Cantor Verlag

involve similar underlying pathways.

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 02 Oct 2002

The insulinotropic effect of (+)-monocalcium bis [(2S)-2-benzyl-3-(cis-hexahydro-2-isoindolinyl-carbonyl)propionate]dihydrate (CAS 145375-43-5, KAD-1229) was assessed by comparing it with those of glibenclamide (CAS 10238-21-8), nateglinide (CAS 105816-04-4), and repaglinide (CAS 135062-02-1) using HIT T15 cells, a hamster insulinoma cell line. Although their potencies were different, KAD-1229, glibenclamide, nateglinide, and repaglinide all concentration-dependently and significantly induced insulin release from these cells. Further, each agent displaced the binding of 3H-glibenclamide to the cell membrane and inhibited 86Rb+ efflux from the cells. These results indicate that KAD-1229, glibenclamide, nateglinide, and repaglinide each exert their insulinotropic effect by binding to the glibenclamide binding sites (sulfonylurea receptors) on pancreatic β -cells and closing K+ channels. Diazoxide, a K+ channel opener, and nitrendipine, a Ca2+ blocker, suppressed

the insulin release induced by KAD-1229 or glibenclamide. These results demonstrate that the insulinotropic actions of KAD-1229 and glibenclamide

CC 1-10 (Pharmacology)

ST antihyperglycemic KAD1229 insulinotrope pancreas beta cell diabetes mellitus; nateglinide repaglinide glibenclamide hypoglycemic KAD1229 diabetes; insulin secretagogue K channel calcium blocker sulfonylurea receptor antidiabetic

IT Antidiabetic agents

Diabetes mellitus

(mechanism of antihyperglycemic agent KAD-1229 insulinotropic effect on hamster pancreatic β -cells)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:635931 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 135:185506

TITLE: Antidiabetic agents containing α -glucosidase

inhibitors and insulin secretion promoters

INVENTOR(S): Sugiyama, Yasuo; Odaka, Hiroyuki; Sakiyama, Hiroshi;

Iwasaki, Masato; Funatsu, Masami

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
_ _ _ _
                                            ------
                                20010830
                                            WO 2001-JP1282
                                                                   20010222 <--
     WO 2001062295
                         A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2401356
                          A1
                                20010830
                                            CA 2001-2401356
                                                                   20010222 <--
     AU 2001034114
                          Α5
                                20010903
                                            AU 2001-34114
                                                                   20010222 <--
                                20030326
                                            EP 2001-906193
     EP 1295609
                          A1
                                                                   20010222 <--
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                         Α
                                20011113
                                            JP 2001-47695
                                                                    20010223 <--
     JP 2001316293
                                20030227
                                            US 2002-204783
     US 2003040490
                          A1
                                                                   20020821 <--
PRIORITY APPLN. INFO.:
                                            JP 2000-52297
                                                                A 20000224 <--
                                            WO 2001-JP1282
                                                              W 20010222 <--
ED
     Entered STN: 31 Aug 2001
     Drugs containing, as the active ingredients, exclusively a combination of an
AB
     α-glucosidase inhibitor with a non-sulfonylurea insulin secretion promoter,
     are useful as preventives and remedies for diabetes, etc. Diabetic patients
     were administered with a tablet containing 0.2 mg voglibose and a tablet
     containing 2 mg repaglinide before breakfast and blood samples were taken 1 h
     after meals and the results showed a significant decrease in blood glucose
     levels.
IC
     ICM A61K045-06
     ICS A61K031-44; A61K031-405; A61K031-198; A61K031-702; A61K031-133;
          A61K031-70; A61P003-10; A61P043-00
     63-6 (Pharmaceuticals)
CC
     Section cross-reference(s): 1
     antidiabetic glucosidase inhibitor insulin secretion promoter;
ST
     voglibose repaglinide diabetes control
IT
     Antidiabetic agents
        (antidiabetic agents containing α-glucosidase inhibitors
        and insulin secretion promoters)
     Drug delivery systems
TT
        (tablets; antidiabetic agents containing \alpha\text{-glucosidase}
        inhibitors and insulin secretion promoters)
     56180-94-0, Acarbose
                            72432-03-2, Miglitol
                                                   80879-63-6, Emiglitate
IT
     83480-29-9, Voglibose 105816-04-4, Nateglinide
                                                        135062-02-1,
     Repaglinide 145375-43-5, Mitiglinide
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (antidiabetic agents containing \alpha-glucosidase inhibitors
        and insulin secretion promoters)
     9001-42-7, \alpha-Glucosidase
                                9004-10-8, Insulin, biological studies
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antidiabetic agents containing \alpha-glucosidase inhibitors
        and insulin secretion promoters)
IT
     50-99-7, D-Glucose, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (blood; antidiabetic agents containing \alpha-glucosidase
        inhibitors and insulin secretion promoters)
```

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2000:814308 HCAPLUS Full-text

DOCUMENT NUMBER: 133:359230

TITLE: Use of succinic acid derivatives to obtain a medicine

for treating inflammation

INVENTOR(S): Caille, Dominique

PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.	PATENT NO.						KIND DATE			APPLICATION NO.						DATE			
WC	WO 2000067752						A1 20001116			WO 2000-FR1246						20000509 <			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,		
		CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,		
		ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,		
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,		
		SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZW	
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,		
		DK,	ES,	FI,	FR,	GB,	GR,	ΙĖ,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,		
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						
FF	FR 2793411					:	2000	1117	FR 1999-5978						19990511 <				
FF	FR 2793411						2001	0629											
E	EP 1178794						1 · 20020213				EP 2000-927322					20000509 <			
E	EP 1178794						20050907												
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FI,	RO												
JI	JP 2002544163						20021224			JP 2000-616778					20000509 <				
A7	AT 303807					20050915			AT 2000-927322						20000509 <				
PRIORIT	PRIORITY APPLN. INFO.:									FR 1	999-	5978			A 1	9990	511	<	
									. 1	WO 2	000-	FR12	46	1	₩ 2	0000	509	<	

OTHER SOURCE(S): MARPAT 133:359230

ED Entered STN: 21 Nov 2000

GI

AB The invention concerns the use of succinic acid derivs. of general formula (I) wherein: A represents a Ph group optionally substituted by one, two or three substituents selected among a halogen, a C1-6 alkyl, C1-6 alkoxy group; a Ph, furyl, pyridyl or cycloalkyl with 3 to 8 carbon atoms; B represents an aminobicyclic group which consists of an amino cyclic compound with 5 or 6 members condensed with a cycloalkyl ring with 5 or 6 members which may have 1 or 2 unsatd. bonds, provided that B is bound to the carbon atom of the

carbonyl group on the nitrogen atom; each R represents a hydrogen atom and all the R radicals are combined together to form a chemical bond; R1 represents a hydrogen atom, a C1-6 alkyl group, an aralkyl group with 7 to 10 carbon atoms; when there exist geometric isomers, each geometric isomer, the isomers E and the isomers Z thereof, the isomers trans and the isomers cis, for treating inflammation. The compns. are administered at a daily dose of 1-100 mg orally, or 0.1-100 mg parenterally (no data).

IC ICM A61K031-4035 ICS A61P029-00

CC 1-7 (Pharmacology)

ST succinic acid deriv inflammation inhibitor

IT Nerve, disease

(diabetic neuropathy; use of succinic acid derivs. to obtain medicine for treating inflammation)

IT Arthritis

(polyarthritis, inhibitors; use of succinic acid derivs. to obtain medicine for treating inflammation)

IT 110-15-6D, Succinic acid, derivs. 145375-43-5

3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of succinic acid derivs. to obtain medicine for treating inflammation)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 161 25-49 ibib ab ind

L61 ANSWER 25 OF 49 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 2005331235 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15981944

TITLE: Pharmacology of the meglitinide analogs: new treatment

options for type 2 diabetes mellitus.

AUTHOR: Malaisse Willy J

CORPORATE SOURCE: Laboratory of Experimental Hormonology, Brussels Free

University, Brussels, Belgium.. malaisse@ulb.ac.be

SOURCE: Treatments in endocrinology, (2003) Vol. 2, No.

6, pp. 401-14. Ref: 83

Journal code: 101132977. ISSN: 1175-6349.

PUB. COUNTRY: New Zealand

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200507

ENTRY DATE: Entered STN: 29 Jun 2005

Last Updated on STN: 13 Jul 2005 Entered Medline: 12 Jul 2005

The expression meglitinide analogs was introduced in 1995 to cover new molecules proposed as non-sulfonylurea insulinotropic agents and displaying structural analogy with meglitinide, such as repaglinide, nateglinide, and mitiglinide. Meglitinide analogs display, as judged by conformation analysis, a U-shaped configuration similar to that of antihyperglycemic sulfonylureas such as glibenclamide (glyburide) and glimepiride. In rat pancreatic islets incubated in the presence of 7.0 mmol/L D-glucose, repaglinide and mitiglinide demonstrate comparable concentration-response relationships for stimulation of insulin release, with a threshold value < 10 nmol/L and a maximal secretory response at about 10 nmol/L. Several findings indicate that meglitinide analogs provoke the closing of adenosine triphosphate-sensitive potassium

channels, with subsequent gating of voltage-sensitive calcium channels. The effects of meglitinide analogs upon the binding of [3H]glibenclamide to islet cells membranes reinforces this concept. At variance, however, with other meglitinide analogs, the ionic and secretory response to repaglinide (10 micromol/L) is not rapidly reversible in perifused rat islets. In experiments conducted in vivo in control and diabetic rats, repaglinide provokes a greater and more rapid increase in plasma insulin concentration and an earlier fall in qlycemia than glibenclamide or glimepiride. Onset of effect is also more rapid and duration of effect shorter with nateglinide versus glibenclamide. In clinical studies, single or repeated daily administration of repaglinide increased plasma insulin concentration in a dose-dependent manner, with an incremental peak reached about 2 hours after repaglinide intake. Plasma concentrations of repaglinide are about 5.0 microg/L 2-2.5 hours after oral intake of the drug. Despite the slow reversibility of repaglinide action in vitro, this drug offers advantages over glibenclamide in terms of the possible occurrence of hypoglycemia if a meal is missed. In volunteers receiving a single oral dose of nateglinide (120mg) 10 minutes before a standardized 800 Kcal breakfast, the plasma insulin concentration was higher 5, 10, and 20 minutes after meal intake than when they received a single dose of repaglinide (0.5 or 2.0mg) or placebo 10 minutes before breakfast. Peak plasma concentrations of nateglinide were reached within 2 hours in most volunteers. Peak plasma concentrations of mitiglinide were reached 30 minutes after a single oral dose in a representative volunteer. Mitiglinide significantly suppressed meal-induced elevations in blood glucose concentrations in a study of patients with type 2 diabetes. In conclusion, two obvious differences among these meglitinide analogs should be underlined. First, on a molar basis, nateglinide is somewhat less potent than repaglinide or mitiglinide, as an insulinotropic agent. The maximal secretory responses evoked by these three meglitinide analogs are, however, identical to one another. Secondly, and as already mentioned, the functional effects of nateglinide and mitiglinide are more rapidly reversible than those of repaglinide, for instance in perifused rat islets. The meglitinide analogs offer the advantage over the long-acting antihyperglycemic sulfonylurea glibenclamide of minimizing the risk of undesirable hypoglycemia.

CT Animals

*Benzamides: TU, therapeutic use

*Carbamates: TU, therapeutic use

*Cyclohexanes: TU, therapeutic use

*Diabetes Mellitus, Type 2: DT, drug therapy

Humans

*Hypoglycemic Agents: TU, therapeutic use

*Phenylalanine: AA, analogs & derivatives

*Phenylalanine: TU, therapeutic use

*Piperidines: TU, therapeutic use

RN 105816-04-4 (nateglinide); 135062-02-1 (repaglinide); 54870-28-9

(meglitinide); 63-91-2 (Phenylalanine)

CN 0 (Benzamides); 0 (Carbamates); 0 (Cyclohexanes); 0 (Hypoglycemic Agents);
0 (Piperidines)

L61 ANSWER 26 OF 49 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 2002271275 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 12010187

TITLE: Effect of KAD-1229, a novel hypoglycaemic agent, on plasma

glucose levels after meal load in type 2 diabetic

rats.

AUTHOR: Ichikawa Kiyoshi; Yamato Tokuhisa; Ojima Kazuma; Tsuji

Atsutoshi; Ishikawa Kohtaro; Kusama Hiroshi; Kojima Masami

CORPORATE SOURCE: Pharmacology Laboratories, Kissei Pharmaceutical Co. Ltd,

Hotaka, Nagano, Japan.. kiyoshi ichikawa@pharm.kissei.co.jp

SOURCE: Clinical and experimental pharmacology & physiology,

(2002 May-Jun) Vol. 29, No. 5-6, pp. 423-7.

Journal code: 0425076. ISSN: 0305-1870.

PUB. COUNTRY: Australia

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200208

ENTRY DATE: Entered STN: 16 May 2002

Last Updated on STN: 30 Aug 2002 Entered Medline: 29 Aug 2002

AB 1. The effects of KAD-1229 (a novel non-sulphonylurea agent), voglibose (an alpha-glucosidase inhibitor) and nateglinide (a non-sulphonylurea antihyperglycaemic agent) on hyperglycaemia induced by a meal load were assessed in diabetic rats. 2. KAD-1229 suppressed the increase in plasma glucose levels seen after a meal load and the area under the curve for plasma glucose levels (AUCglucose) up to 5 h after the meal load. 3. Voglibose also suppressed the increase in plasma glucose levels; however, a significant decrease in AUCglucose following voglibose was not observed. 4. Nateglinide suppressed the increase in plasma glucose levels at 30 min and 1 h after the meal load; however, plasma glucose levels was above control thereafter and the AUCglucose was not decreased. 5. The results indicate that KAD-1229 has an antihyperglycaemic effect and KAD-1229 is suggested to be a suitable agent for controlling post-prandial hyperglycaemia.

CT Animals

*Blood Glucose: ME, metabolism Cyclohexanes: PD, pharmacology

Diabetes Mellitus, Experimental: BL, blood

*Diabetes Mellitus, Experimental: DT, drug therapy

Diabetes Mellitus, Type 2: BL, blood

*Diabetes Mellitus, Type 2: DT, drug therapy

Food

*Hypoglycemic Agents: PD, pharmacology

*Indoles: PD, pharmacology

*Inositol: AA, analogs & derivatives

Inositol: PD, pharmacology

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: PD, pharmacology

*Postprandial Period

Rats

Rats, Wistar

Species Specificity

RN 105816-04-4 (nateglinide); 63-91-2 (Phenylalanine); 6917-35-7 (Inositol); 83480-29-9 (voglibose)

L61 ANSWER 27 OF 49 MEDLINE on STN DUPLICATE 4

ACCESSION NUMBER: 2001260288 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11264248

TITLE: Effects of mitiglinide (S 21403) on Kir6.2/SUR1,

Kir6.2/SUR2A and Kir6.2/SUR2B types of ATP-sensitive

potassium channel.

AUTHOR: Reimann F; Proks P; Ashcroft F M

CORPORATE SOURCE: University Laboratory of Physiology, Parks Road, Oxford OX1

3PT.

SOURCE: British journal of pharmacology, (2001 Apr) Vol.

132, No. 7, pp. 1542-8.

Journal code: 7502536. ISSN: 0007-1188.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200105

ENTRY DATE: Entered STN: 21 May 2001

Last Updated on STN: 21 May 2001 Entered Medline: 17 May 2001

We have investigated the mechanism of action of the novel anti- diabetic AB agent mitiglinide (S 21403) on Kir6.2/SUR1, Kir6.2/SUR2A and Kir6.2/SUR2B types of ATP-sensitive potassium (K(ATP)) channel. These possess a common pore-forming subunit, Kir6.2, and different regulatory sulphonylurea receptor (SUR) subunits. It is believed that they correspond to native K(ATP) channels in pancreatic beta-cells, heart and non-vascular smooth muscle, respectively. Kir6.2 was coexpressed with SUR1, SUR2A or SUR2B in Xenopus oocytes and macroscopic currents were recorded in giant inside-out membrane patches. Mitiglinide was added to the intracellular membrane surface. 3. Mitiglinide inhibited Kir6.2/SUR currents at two sites: a low-affinity site on Kir6.2 and a high-affinity site on SUR. Low-affinity inhibition was similar for all three types of K(ATP) channel but high-affinity inhibition was greater for Kir6.2/SUR1 currents (IC(50), 4 nM) than for Kir6.2/SUR2A or Kir6.2/SUR2B currents (IC(50), 3 and 5 microM, respectively). 4. Inhibition of Kir6.2/SUR1 currents was only slowly reversible on the time scale of electrophysiological experiments. 5. Kir6.2/SUR1-S1237Y currents, which previously have been shown to lack high affinity tolbutamide inhibition, resembled Kir6.2/SUR2 currents in being unaffected by 100 nM but blocked by 10 microM mitiglinide. 6. Our results show that mitiglinide is a high-affinity drug that shows a 1000 fold greater affinity for the beta-cell type than the cardiac and smooth muscle types of K(ATP) channel, when measured in excised patches.

CT Check Tags: Female

*Adenosine Triphosphate: PH, physiology

Animals

Dose-Response Relationship, Drug

*Indoles: PD, pharmacology

Membrane Potentials: DE, drug effects

Mice

*Potassium Channels: DE, drug effects Potassium Channels: GE, genetics Potassium Channels: PH, physiology

*Potassium Channels, Inwardly Rectifying

Protein Subunits

RNA, Messenger: AD, administration & dosage

RNA, Messenger: GE, genetics

Xenopus laevis

RN 56-65-5 (Adenosine Triphosphate)

CN 0 (Indoles); 0 (Potassium Channels); 0 (Potassium Channels, Inwardly

Rectifying); 0 (Protein Subunits); 0 (RNA, Messenger); 0 (

mitiglinide)

L61 ANSWER 28 OF 49 MEDLINE on STN DUPLICATE 5

ACCESSION NUMBER: 2001689244 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11716850

TITLE: The effects of mitiglinide (KAD-1229), a new anti-diabetic drug, on ATP-sensitive K+ channels

and insulin secretion: comparison with the sulfonylureas

and nateglinide.

AUTHOR: Sunaga Y; Gonoi T; Shibasaki T; Ichikawa K; Kusama H; Yano

H; Seino S

CORPORATE SOURCE: Department of Cellular and Molecular Medicine, Graduate

School of Medicine, Chiba University 1-8-1 Inohana,

Chuo-ku, 260-8670, Chiba, Japan.

SOURCE: European journal of pharmacology, (2001 Nov 9)

Vol. 431, No. 1, pp. 119-25.

Journal code: 1254354. ISSN: 0014-2999.

PUB. COUNTRY:

Netherlands

DOCUMENT TYPE:

(COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200201

ENTRY DATE:

Entered STN: 11 Dec 2001

Last Updated on STN: 25 Jan 2002 Entered Medline: 11 Jan 2002

AB Mitiglinide (KAD-1229), a new anti-diabetic drug, is thought to stimulate insulin secretion by closing the ATP-sensitive K+ (K(ATP)) channels in pancreatic beta-cells. However, its selectivity for the various K(ATP) channels is not known. In this study, we examined the effects of mitiglinide on various cloned K(ATP) channels (Kir6.2/SUR1, Kir6.2/SUR2A, and Kir6.2/SUR2B) reconstituted in COS-1 cells, and compared them to another meglitinide-related compound, nateglinide. Patch-clamp analysis using insideout recording configuration showed that mitiglinide inhibits the Kir6.2/SUR1 channel currents in a dose-dependent manner (IC50 value, 100 nM) but does not significantly inhibit either Kir6.2/SUR2A or Kir6.2/SUR2B channel currents even at high doses (more than 10 microM). Nateglinide inhibits Kir6.2/SUR1 and Kir6.2/SUR2B channels at 100 nM, and inhibits Kir6.2/SUR2A channels at high concentrations (1 microM). Binding experiments on mitiglinide, nateglinide, and repaglinide to SUR1 expressed in COS-1 cells revealed that they inhibit the binding of [3H]glibenclamide to SUR1 (IC50 values: mitiglinide, 280 nM; nateglinide, 8 microM; repaglinide, 1.6 microM), suggesting that they all share a glibenclamide binding site. The insulin responses to glucose, mitiglinide, tolbutamide, and glibenclamide in MIN6 cells after chronic mitiglinide, nateglinide, or repaglinide treatment were comparable to those after chronic tolbutamide and glibenclamide treatment. These results indicate that, similar to the sulfonylureas, mitiglinide is highly specific to the Kir6.2/SUR1 complex, i.e., the pancreatic beta-cell K(ATP) channel, and suggest that mitiglinide may be a clinically useful anti-diabetic drug.

CT *ATP-Binding Cassette Transporters

Animals COS Cells Cell Line

Cyclohexanes: PD, pharmacology Glyburide: PD, pharmacology

- *Hypoglycemic Agents: PD, pharmacology
- *Indoles: PD, pharmacology
- *Insulin: ME, metabolism Patch-Clamp Techniques

Pacchi-Clamp Techniques

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: PD, pharmacology Potassium Channels: GE, genetics

*Potassium Channels: ME, metabolism

*Potassium Channels, Inwardly Rectifying

Receptors, Drug: GE, genetics Receptors, Drug: ME, metabolism

Sulfonylurea Compounds: PD, pharmacology

Tolbutamide: PD, pharmacology

Transfection

RN 10238-21-8 (Glyburide); 105816-04-4 (nateglinide); 11061-68-0 (Insulin); 63-91-2 (Phenylalanine); 64-77-7 (Tolbutamide)

CN 0 (ATP-Binding Cassette Transporters); 0 (Cyclohexanes); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (Potassium Channels); 0 (Potassium Channels,

Inwardly Rectifying); 0 (Receptors, Drug); 0 (Sulfonylurea Compounds); 0 (
mitiglinide); 0 (sulfonylurea receptor)

L61 ANSWER 29 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2006653767 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 17087304

TITLE: Glinide(s), sulfonylurea(s).

AUTHOR: Arakawa Masayuki; Hirose Takahisa

CORPORATE SOURCE: Department of Medicine, Metabolism and Endocrinology,

Juntendo University School of Medicine.

SOURCE: Nippon rinsho. Japanese journal of clinical medicine, (2006

Nov) Vol. 64, No. 11, pp. 2107-12. Ref: 16

Journal code: 0420546. ISSN: 0047-1852.

PUB. COUNTRY: Japan

DOCUMENT TYPE: (ENGLISH ABSTRACT)

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: Japanese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200701

ENTRY DATE: Entered STN: 8 Nov 2006

Last Updated on STN: 10 Jan 2007

Entered Medline: 9 Jan 2007

Diabetic macroangiopathy has already developed before diagnosis of diabetes mellitus. Postprandial hyperglycemia has been known as a risk factor for diabetic macroangiopathy and may be more powerful than fasting hyperglycemia. To intervene in hyperglycemia, insulin secretagogues, glinides which selectively stimulate early meal-induced insulin secretion and improve postprandial hyperglycemia, and sulfonylureas which enhance total daily insulin secretion and improve fasting hyperglycemia, have been prescribed as major oral antidiabetic agents. Few evidences that amelioration of glycemic control with insulin secretagogues lower the risk of cardiovascular diseases have been reported. But current studies have shown that intervention in postprandial hyperglycemia with drugs including glinides decreased thickness of carotid IMT as a surrogate marker of atherosclerosis. Results from ongoing large scale intervention study with glinides may clarify whether amelioration of hyperglycemia lower the risk of atherosclerotic events.

CT Arteriosclerosis: ET, etiology

*Arteriosclerosis: PC, prevention & control

Cardiovascular Diseases: ET, etiology

*Cardiovascular Diseases: PC, prevention & control

*Cyclohexanes: TU, therapeutic use

Diabetic Angiopathies: ET, etiology

*Diabetic Angiopathies: PC, prevention & control

Glucose Intolerance: CO, complications
Glucose Intolerance: DT, drug therapy
Hyperglycemia: CO, complications
*Hyperglycemia: DT, drug therapy
Hyperglycemia: PP, physiopathology

*Hypoglycemic Agents: TU, therapeutic use

*Indoles: TU, therapeutic use

Insulin: SE, secretion

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: TU, therapeutic use

Postprandial Period

Risk Factors

*Sulfonylurea Compounds: TU, therapeutic use

RN 105816-04-4 (nateglinide); 11061-68-0 (Insulin); 63-91-2 (Phenylalanine)

CN 0 (Cyclohexanes); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (Sulfonylurea Compounds); 0 (mitiglinide)

L61 ANSWER 30 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2005676318 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 16363700

TITLE: Significance of insulin secretion pattern lectured by

"glinides" in the treatment of postprandial

hyperglycemia.

AUTHOR: Hirose Takahisa

CORPORATE SOURCE: Department of Medicine, Metabolism and Endocrinology,

Juntendo University School of Medicine.

SOURCE: Nippon rinsho. Japanese journal of clinical medicine, (2005

Dec) Vol. 63, No. 12, pp. 2237-44. Ref: 14

Journal code: 0420546. ISSN: 0047-1852.

PUB. COUNTRY: Japan

DOCUMENT TYPE: (ENGLISH ABSTRACT)

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: Japanese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200603

ENTRY DATE: Entered STN: 22 Dec 2005

Last Updated on STN: 11 Mar 2006 Entered Medline: 10 Mar 2006

The mechanisms by which postprandial hyperglycemia is elicited were discussed through therapies of type 2 diabetes using "glinides". It has been believed that the earliest determinant of progression to type 2 diabetes is a loss of early insulin secretion, a defect which results in postprandial hyperglycemia and is often believed to reflect insulin resistance. To prove that, we improved insulin secretion pattern without increase of total amount of insulin secretion using glinide and assessed glucose response. Glinide which selectively enhances early meal-induced insulin secretion improved postprandial hyperglycemia, could provide a valuable treatment option in the prevention and treatment of type 2 diabetes.

CT *Cyclohexanes: TU, therapeutic use

Diabetes Mellitus, Type 2: CO, complications

Eating Humans

*Hyperglycemia: DT, drug therapy Hyperglycemia: ET, etiology

*Hypoglycemic Agents: TU, therapeutic use

*Indoles: TU, therapeutic use

*Insulin: SE, secretion

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: TU, therapeutic use

RN 105816-04-4 (nateglinide); 11061-68-0 (Insulin); 63-91-2 (Phenylalanine)

CN 0 (Cyclohexanes); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (

mitiglinide)

L61 ANSWER 31 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2005147537 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15779420

TITLE: Effects of mitiglinide in treatment of impaired

glucose tolerance.

AUTHOR: Katahira Hiroshi; Ishida Hitoshi

CORPORATE SOURCE: Third Department of Internal Medicine, Kyorin University

School of Medicine.

SOURCE: Nippon rinsho. Japanese journal of clinical medicine, (2005

Feb) Vol. 63 Suppl 2, pp. 444-50. Ref: 15

Journal code: 0420546. ISSN: 0047-1852.

PUB. COUNTRY: Japan

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE: General Review; (REVIEW) LANGUAGE: Japanese FILE SEGMENT: Priority Journals ENTRY MONTH: 200506 ENTRY DATE: Entered STN: 23 Mar 2005 Last Updated on STN: 15 Jun 2005 Entered Medline: 14 Jun 2005 CT Adenosine Triphosphate: ME, metabolism Animals Diabetes Mellitus, Type 2: ET, etiology Diabetes Mellitus, Type 2: PC, prevention & control Humans Hyperglycemia: CO, complications *Hyperglycemia: DT, drug therapy Hypoglycemic Agents: PK, pharmacokinetics *Hypoglycemic Agents: PD, pharmacology *Hypoglycemic Agents: TU, therapeutic use Indoles: PK, pharmacokinetics *Indoles: PD, pharmacology *Indoles: TU, therapeutic use *Insulin: SE, secretion Postprandial Period Potassium Channels: DE, drug effects Stimulation, Chemical 11061-68-0 (Insulin); 56-65-5 (Adenosine Triphosphate) RN 0 (Hypoglycemic Agents); 0 (Indoles); 0 (Potassium Channels); 0 (CN mitiglinide) L61 ANSWER 32 OF 49 MEDLINE on STN ACCESSION NUMBER: 2005147534 MEDLINE Full-text DOCUMENT NUMBER: PubMed ID: 15779417 Selection of oral antidiabetic drugs. TITLE: Iwamoto Yasuhiko AUTHOR: CORPORATE SOURCE: Diabetes Center, Tokyo Women's Medical University. Nippon rinsho. Japanese journal of clinical medicine, (2005 SOURCE: Feb) Vol. 63 Suppl 2, pp. 428-32. Ref: 9 Journal code: 0420546. ISSN: 0047-1852. PUB. COUNTRY: Japan DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW) LANGUAGE: Japanese FILE SEGMENT: Priority Journals ENTRY MONTH: 200506 ENTRY DATE: Entered STN: 23 Mar 2005 Last Updated on STN: 15 Jun 2005 Entered Medline: 14 Jun 2005 CT Acarbose Administration, Oral Biquanides Cardiovascular Diseases: ET, etiology Cardiovascular Diseases: PC, prevention & control Diabetes Mellitus, Type 2: ET, etiology Diabetes Mellitus, Type 2: PC, prevention & control Enzyme Inhibitors Glucose Intolerance: CO, complications Glucose Intolerance: DT, drug therapy Humans *Hypoglycemic Agents Hypoglycemic Agents: AD, administration & dosage

Hypoglycemic Agents: AE, adverse effects Hypoglycemic Agents: CL, classification Hypoglycemic Agents: PD, pharmacology

Indoles Risk

Sulfonylurea Compounds Thiazolidinediones

alpha-Glucosidases: AI, antagonists & inhibitors

RN 2295-31-0 (2,4-thiazolidinedione); 56180-94-0 (Acarbose)

CN 0 (Biguanides); 0 (Enzyme Inhibitors); 0 (Hypoglycemic Agents);
0 (Indoles); 0 (Sulfonylurea Compounds); 0 (Thiazolidinediones); 0 (

mitiglinide); EC 3.2.1.20 (alpha-Glucosidases)

L61 ANSWER 33 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2004624721 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15561904

TITLE: The impact of ATP-sensitive K+ channel subtype selectivity

of insulin secretagogues for the coronary vasculature and

the myocardium.

AUTHOR: Quast Ulrich; Stephan Damian; Bieger Susanne; Russ Ulrich CORPORATE SOURCE: Department of Pharmacology and Toxicology, Medical Faculty,

University of Tubingen, Wilhelmstrasse. 56, D-72074 Tubingen, Germany.. ulrich.quast@uni-tuebingen.de

SOURCE: Diabetes, (2004 Dec) Vol. 53 Suppl 3, pp. S156-64. Ref: 58

Journal code: 0372763. ISSN: 0012-1797.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals

ENTRY MONTH: 200504

ENTRY DATE: Entered STN: 20 Dec 2004

Last Updated on STN: 15 Apr 2005 Entered Medline: 14 Apr 2005

AB Insulin secretagogues (sulfonylureas and glinides) increase insulin secretion by closing the ATP-sensitive K+ channel (KATP channel) in the pancreatic betacell membrane. KATP channels subserve important functions also in the heart. First, KATP channels in coronary myocytes contribute to the control of coronary blood flow at rest and in hypoxia. Second, KATP channels in the sarcolemma of cardiomyocytes (sarcKATP channels) are required for adaptation of the heart to stress. In addition, the opening of sarcKATP channels and of KATP channels in the inner membrane of mitochondria (mitoKATP channels) plays a central role in ischemic preconditioning. Opening of sarcKATP channels also underlies the ST-segment elevation of the electrocardiogram, the primary diagnostic tool for initiation of lysis therapy in acute myocardial infarction. Therefore, inhibition of cardiovascular KATP channels by insulin secretagogues is considered to increase cardiovascular risk. Electrophysiological experiments have shown that the secretagogues differ in their selectivity for the pancreatic over the cardiovascular KATP channels, being either highly selective (approximately 1,000x; short sulfonylureas such as nateglinide and mitiglinide), moderately selective (10-20x; long sulfonylureas such as glibenclamide [glyburide]), or essentially nonselective (<2x; repaglinide). New binding studies presented here give broadly similar results. In clinical studies, these differences are not yet taken into The hypothesis that the in vitro selectivity of the insulin secretagogues is of importance for the cardiovascular outcome of diabetic patients with coronary artery disease needs to be tested.

CT *Adenosine Triphosphate: PH, physiology Animals

*Coronary Circulation: PH, physiology

*Heart: PH, physiology

Humans

*Hypoglycemic Agents: PD, pharmacology

*Insulin: SE, secretion

Models, Molecular

Potassium Channels, Inwardly Rectifying: CH, chemistry Potassium Channels, Inwardly Rectifying: DE, drug effects *Potassium Channels, Inwardly Rectifying: PH, physiology

Protein Conformation

Protein Subunits: CH, chemistry

Sulfonylurea Compounds: PD, pharmacology

RN 11061-68-0 (Insulin); 56-65-5 (Adenosine Triphosphate)

CN 0 (Hypoglycemic Agents); 0 (Kir6.2 channel); 0 (Potassium Channels, Inwardly Rectifying); 0 (Protein Subunits); 0 (Sulfonylurea Compounds)

L61 ANSWER 34 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2004390172 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15293870

TITLE: Mitiglinide: KAD 1229, S 21403.

AUTHOR: Anonymous

SOURCE: Drugs in R&D, (2004) Vol. 5, No. 2, pp. 98-101. Ref: 13

Journal code: 100883647. ISSN: 1174-5886.

PUB. COUNTRY: New Zealand

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200502

ENTRY DATE: Entered STN: 6 Aug 2004

Last Updated on STN: 4 Feb 2005 Entered Medline: 3 Feb 2005

Mitiglinide [KAD 1229, S 21403], a derivative of benzylsuccinic acid, is a AB potassium channel antagonist undergoing development with Kissei for the treatment of type 2 diabetes mellitus. It has potent oral hypoglycaemic activity and is structurally different from the sulphonylureas, although it stimulates calcium influx by binding to the suphonylurea receptor on pancreatic beta-cells and closing K+ATP channels. Mitiglinide belongs to a family of meglitinide analogues that also includes repaglinide and nateglinide. Mitiglinide is licensed to Servier for Europe, where it is undergoing phase III development, and for Russia, the Commonwealth of Independent States, the Baltic Republics, the Middle East, Oceania, China (including Hong Kong) and Taiwan. Kissei exclusively licensed mitiglinide to Choongwae Pharma for South Korea in March 2003. In August 2002, Kissei and Takeda entered into a co-marketing agreement for mitiglinide in Japan. companies will co-market the agent under a single brand name. Mitiglinide was licensed to Purdue Pharma for the US, Canada, Mexico and Central and South America. However, Kissei and Purdue Pharma terminated their agreement in February 2001 following Purdue Pharma's decision to concentrate on core areas such as oncology and analgesics. Kissei's US subsidiary, Kissei Pharma US, is currently carrying on the ongoing phase II clinical development in the US. However, in its Annual Report 2003, Kissei announced that it is considering outlicensing mitiglinide for development in marketing in North America. Mitiglinide has been recommended for approval in Japan for the management of postprandial hyperglycaemia in patients with type 2 diabetes. Kissei is also conducting phase II/III clinical trials with a combination of mitiglinide and an alpha-glucosidase inhibitor (additional indication) in patients with type 2 diabetes in Japan. In the US, the agent is being evaluated in phase II clinical trials with Kissei Pharma USA. Mitiglinide is also undergoing a phase-III, 12-month, multicentre, randomised, double-blind study in a total of

710 patients in comparison with repaglinide for the treatment of type 2 diabetes. This study will be followed by a 12-month open-label treatment with mitiglinide alone or in combination therapy. Servier (Australia) conducted a randomised, double-blind, multicentre phase III study in Australia comparing mitiglinide with metformin or a combination of the two for the treatment of type 2 diabetes.

CT Animals

Diabetes Mellitus, Type 2: DT, drug therapy

Humans

Hypoglycemic Agents: PD, pharmacology
*Hypoglycemic Agents: TU, therapeutic use

Indoles: PD, pharmacology
*Indoles: TU, therapeutic use
Randomized Controlled Trials

CN 0 (Hypoglycemic Agents); 0 (Indoles); 0 (mitiglinide)

L61 ANSWER 35 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2003345780 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 12877090

TITLE: Nateglinide and mitiglinide.

AUTHOR: Odawara Masato

CORPORATE SOURCE: Department of Endocrinology and Metabolism, Toranomon

Hospital.

SOURCE: Nippon rinsho. Japanese journal of clinical medicine,

(2003 Jul) Vol. 61, No. 7, pp. 1230-7. Ref: 12

Journal code: 0420546. ISSN: 0047-1852.

PUB. COUNTRY: Japan

DOCUMENT TYPE: (ENGLISH ABSTRACT)

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: Japanese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200309

ENTRY DATE: Entered STN: 25 Jul 2003

Last Updated on STN: 26 Sep 2003 Entered Medline: 25 Sep 2003

AB Patients with type 2 diabetes mellitus are associated with insulin resistance and/or impaired insulin secretion. Previous observations indicate that Japanese patients with type 2 diabetes tend to have impaired insulin response after glycemic load more often than Caucasian counterparts. Recently it has been reported that hyperglycemia after glucose load is itself a risk factor for the development of cardiovascular complications in the absence of elevated fasting plasma glucose. Recent observations on the association of postchallenge or post-prandial hyperglycemia with cardiovascular events suggest that lowering post-prandial plasma glucose may protect patients from developing cardiovascular diseases. Results of STOP-NIDDM trial suggest that nateglinide, which attenuates post-prandial glycemic surge in type 2 diabetes, may also be helpful for the protection against cardiovascular events. Nateglinide exerts its effects shortly after its administration and the effects continue for only about 3 hours. The patients receiving this agent rarely gain weight and develop hypoglycemia. This agent exerts hypoglycemic effects additively with alpha-gulucosidase inhibitors or metformin.

CT Cardiovascular Diseases: ET, etiology

Cardiovascular Diseases: PC, prevention & control

Cyclohexanes: PD, pharmacology *Cyclohexanes: TU, therapeutic use

Diabetes Mellitus, Type 2: CO, complications Diabetes Mellitus, Type 2: DT, drug therapy

Drug Therapy, Combination

Humans

Hyperglycemia: CO, complications *Hyperglycemia: DT, drug therapy *Hypoglycemic Agents: TU, therapeutic use Indoles: PD, pharmacology *Indoles: TU, therapeutic use *Insulin: SE, secretion Insulin Resistance Metformin: TU, therapeutic use Phenylalanine: AA, analogs & derivatives Phenylalanine: PD, pharmacology *Phenylalanine: TU, therapeutic use Postprandial Period Stimulation, Chemical 105816-04-4 (nateglinide); 11061-68-0 (Insulin); 63-91-2 (Phenylalanine); RN657-24-9 (Metformin) 0 (Cyclohexanes); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (CN mitiglinide) L61 ANSWER 36 OF 49 MEDLINE on STN ACCESSION NUMBER: 2002028119 MEDLINE Full-text DOCUMENT NUMBER: PubMed ID: 11472274 TITLE:

Rapid acting insulinotropic agents: restoration of early

insulin secretion as a physiologic approach to improve

glucose control.

Pratley R E; Foley J E; Dunning B E AUTHOR:

Novartis Pharmaceuticals Corporation, 59 Route 10, East CORPORATE SOURCE:

> Hanover, New Jersey 07936, USA.. richard.pratley@pharma.novartis.com

Current pharmaceutical design, (2001 Sep) Vol. 7, SOURCE:

No. 14, pp. 1375-97. Ref: 143

Journal code: 9602487. ISSN: 1381-6128.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

General Review; (REVIEW)

LANGUAGE: English

Priority Journals FILE SEGMENT:

ENTRY MONTH: 200112

ENTRY DATE: Entered STN: 21 Jan 2002

Last Updated on STN: 21 Jan 2002

Entered Medline: 4 Dec 2001

The loss of early insulin secretion appears to be a critical event in the AB deterioration in glucose tolerance during the development of type 2 diabetes. There is therefore a strong rationale for developing new antidiabetic agents aimed at restoring or replacing early prandial insulin secretion and thereby curbing mealtime glucose excursions in patients with type 2 diabetes. Four such new agents are either now available (repaglinide and nateglinide) or in clinical development (KAD-1229 and BTS 67 582). Preclinical studies suggest that each of these new insulinotropic agents share a common receptor/effector mechanism with the sulfonylureas (SUs) but that each may have distinct characteristics that differentiate them from the SUs and from each other. Nateglinide and KAD-1229 clearly stimulate biphasic insulin secretion in vitro and in vivo and their effects are rapidly reversible, whereas the effects of repaglinide and BTS 67 582 are prolonged well beyond their removal from perfusion media in vitro or their clearance in vivo. Available data from human studies indicate that the pharmacokinetics of repaglinide and nateglinide are similar, i.e., they are both rapidly absorbed and eliminated, but consistent with findings from animal studies, the insulinotropic and glucose-lowering effects of repaglinide are slower in onset and more prolonged than those of nateglinide. Repaglinide and nateglinide have been shown to be safe and well-tolerated in patients with type 2 diabetes and to produce

clinically-meaningful reductions of HbA1c, both alone and in combination with agents with complementary modes of action (e.g., metformin and thiazolidinediones). Because these new agents can potentially bring patients to near normoglycemia without an undue risk of hypoglycemia, they are important additions to the therapeutic armamentarium.

CT Animals

Carbamates: CH, chemistry

Carbamates: PK, pharmacokinetics Carbamates: TU, therapeutic use

Cyclohexanes: CH, chemistry

Cyclohexanes: PK, pharmacokinetics
Cyclohexanes: TU, therapeutic use
*Diabetes Mellitus, Type 2: BL, blood

*Diabetes Mellitus, Type 2: DT, drug therapy

*Glucose: ME, metabolism Guanidines: CH, chemistry

Guanidines: PK, pharmacokinetics Guanidines: TU, therapeutic use

Humans

Hypoglycemic Agents: CH, chemistry

Hypoglycemic Agents: PK, pharmacokinetics *Hypoglycemic Agents: TU, therapeutic use

Indoles: CH, chemistry

Indoles: PK, pharmacokinetics
Indoles: TU, therapeutic use

Insulin: BL, blood
Insulin: PH, physiology
*Insulin: SE, secretion

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: CH, chemistry

Phenylalanine: PK, pharmacokinetics Phenylalanine: TU, therapeutic use

Piperidines: CH, chemistry

Piperidines: PK, pharmacokinetics Piperidines: TU, therapeutic use

RN 105816-04-4 (nateglinide); 11061-68-0 (Insulin); 135062-02-1 (repaglinide); 50-99-7 (Glucose); 63-91-2 (Phenylalanine)

CN 0 (BTS 67582); 0 (Carbamates); 0 (Cyclohexanes); 0 (Guanidines); 0
 (Hypoglycemic Agents); 0 (Indoles); 0 (Piperidines); 0 (
 mitiglinide)

L61 ANSWER 37 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2001301378 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 11174074

TITLE: Effect of KAD-1229, a nonsulfonylurea hypoglycemic agent,

on plasma glucose and insulin in streptozotocin-induced

diabetic dogs.

AUTHOR: Misawa K; Ichikawa K; Ojima K; Hamano S; Kitamura T;

Komatsu H

CORPORATE SOURCE: Pharmacological Laboratories, Kissei Pharmaceutical Co.

Ltd., Hotaka, Nagano, Japan.. keiko_misawa@pharm.kissei.co.

qį

SOURCE: Pharmacology, (2001 Feb) Vol. 62, No. 2, pp.

65-72.

Journal code: 0152016. ISSN: 0031-7012.

PUB. COUNTRY: Swi

Switzerland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200105

ENTRY DATE: Entered STN: 4 Jun 2001

Last Updated on STN: 4 Jun 2001 Entered Medline: 31 May 2001

AB Hypoglycemic agents with a rapid onset and short duration of action should be useful for controlling postprandial hyperglycemia. Our aim was to establish a diabetes mellitus model in dogs, and then during an oral glucose tolerance test to compare the hypoglycemic effect and insulinotropic action of KAD-1229, a new hypoglycemic agent, with that of gliclazide, a conventional sulfonylurea. In this model, KAD-1229 reduced the increase in plasma glucose level without producing hypoglycemia. Gliclazide had a weaker effect on reduction of the glucose increase and caused hypoglycemia via a significantly raised insulin secretion in the late phase. A rapid insulinotropic action of KAD-1229 was clearly observed in the portal venous blood. The results suggest that in type 2 diabetes caused by, at least, insulin deficiency, KAD-1229 may improve impaired insulin secretion in the early phase and attenuate hyperglycemia without causing a sustained hypoglycemia. Copyright 2001 S. Karger AG, Basel.

CT Check Tags: Male

Animals

Anti-Bacterial Agents

*Blood Glucose: DE, drug effects

*Diabetes Mellitus, Experimental: BL, blood

Disease Models, Animal.

Dogs

Gliclazide: PD, pharmacology

Glucose Tolerance Test

*Hypoglycemic Agents: PD, pharmacology

*Indoles: PD, pharmacology

*Insulin: BL, blood

Streptozocin

L61 ANSWER 38 OF 49 MEDLINE on STN

ACCESSION NUMBER: 1999215370 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 10199157

TITLE: Non-SU, insulin secretagogues.

AUTHOR: Kikuchi M

CORPORATE SOURCE: Institute for Adult Diseases, Asahi Life Foundation.
SOURCE: Nippon rinsho. Japanese journal of clinical medicine,

(1999 Mar) Vol. 57, No. 3, pp. 702-8. Ref: 21

Journal code: 0420546. ISSN: 0047-1852.

PUB. COUNTRY: Japan

DOCUMENT TYPE: (ENGLISH ABSTRACT)

Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: Japanese

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199905

ENTRY DATE: Entered STN: 1 Jun 1999

Last Updated on STN: 1 Jun 1999 Entered Medline: 18 May 1999

AB The chemical structures, mechanisms of actions, bioavailabilities, insulinotrophic and hypoglycemic actions, and clinical trials of three novel oral hypoglycemic agents, NN-623, A-4166 and KAD-1229 are overviewed. They are non-SU insulin secretagogues and they induce quicker and shorter hypoglycemia than sulphonylureas do, presumably because they are rapidly absorbed into (Tmax: < 30 min) and excreted from blood (T 1/2: < 60 min). They bind to the SU-receptors and suppress K-ATP channels like sulphonylureas

do. They stimulate mainly the initial phase of insulin release and evoke a decrease in postprandial rises in plasma glucose in several animals and humans. Clinical trials demonstrated they are efficacious and safe in the treatment of NIDDM subjects. They are useful as a first choice drug for the early stage of NIDDM.

CT *Cyclohexanes: TU, therapeutic use

*Diabetes Mellitus, Type 2: DT, drug therapy

Humans

*Hypoglycemic Agents: TU, therapeutic use

*Indoles: TU, therapeutic use

*Phenylalanine: AA, analogs & derivatives

Phenylalanine: TU, therapeutic use

RN 105816-04-4 (nateglinide); 63-91-2 (Phenylalanine)

CN 0 (Cyclohexanes); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (
 mitiglinide)

L61 ANSWER 39 OF 49 MEDLINE on STN

ACCESSION NUMBER: 1999410611 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 10479476

TITLE: Effect of the meglitinide analog S21403 on cationic fluxes

and insulin release in perifused rat pancreatic islets

exposed to a high concentration of D-glucose.

AUTHOR: Louchami K; Jijakli H; Malaisse W J

CORPORATE SOURCE: Laboratory of Experimental Medicine, Brussels Free

University, 808 Route de Lennik, Brussels, B-1070, Belgium.

SOURCE: Pharmacological research: the official journal of the

Italian Pharmacological Society, (1999 Sep) Vol.

40, No. 3, pp. 297-300.

Journal code: 8907422. ISSN: 1043-6618.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199911

ENTRY DATE: Entered STN: 11 Jan 2000

Last Updated on STN: 11 Jan 2000

Entered Medline: 1 Nov 1999

The effect of the meglitinide analog S21403 (10 microm) upon (86) Rb and (45) Ca outflow and insulin release was investigated in perifused rat islets exposed to a high concentration of D-glucose (16.7 mm) in order to simulate the situation found in diabetic patients. Under these conditions, S21403 provoked a rapid, sustained and rapidly reversible increase in (86) Rb outflow, (45) Ca efflux and insulin release. These effects were suppressed or reversed when the experiments were conducted in the absence of extracellular Ca2+. They support the view that S21043 could be used as a novel insulinotropic tool in the treatment of non-insulin-dependent diabetes mellitus, the cationic and secretory responses to the drug displaying a favourable time course for prompt and not unduly prolonged activation of islet B-cells. Copyright 1999 Academic Press.

CT Check Tags: Female

Animals

Calcium: ME, metabolism

*Calcium: PK, pharmacokinetics

Calcium Radioisotopes

Cations

*Glucose: PD, pharmacology

*Hypoglycemic Agents: PD, pharmacology

*Indoles: PD, pharmacology

*Insulin: SE, secretion

*Islets of Langerhans: DE, drug effects *Islets of Langerhans: ME, metabolism Islets of Langerhans: SE, secretion

Perfusion

Rats

Rats, Wistar

*Rubidium: PK, pharmacokinetics

Rubidium Radioisotopes

RN 11061-68-0 (Insulin); 50-99-7 (Glucose); 7440-17-7 (Rubidium); 7440-70-2 (Calcium)

CN 0 (Calcium Radioisotopes); 0 (Cations); 0 (Hypoglycemic Agents); 0
 (Indoles); 0 (Rubidium Radioisotopes); 0 (mitiglinide)

L61 ANSWER 40 OF 49 MEDLINE on STN

ACCESSION NUMBER: 2000280282 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 10820647

TITLE: Recent developments and emerging therapies for type 2

diabetes mellitus.

AUTHOR: Evans A J; Krentz A J

CORPORATE SOURCE: Department of Diabetes and Endocrinology, Southampton

General Hospital, England.

SOURCE: Drugs in R&D, (1999 Aug) Vol. 2, No. 2, pp.

75-94. Ref: 106

Journal code: 100883647. ISSN: 1174-5886.

PUB. COUNTRY: New Zealand

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200008

ENTRY DATE: Entered STN: 11 Aug 2000

Last Updated on STN: 11 Aug 2000

Entered Medline: 1 Aug 2000

Most patients with type 2 (non-insulin-dependent) diabetes mellitus require AB pharmacotherapy, initially as monotherapy and subsequently in combination, as adjuncts to diet and exercise. Exogenous insulin is ultimately required in a substantial proportion, reflecting the progressive natural history of the Sulphonylureas and biguanides have been employed for over 4 decades as oral antidiabetic agents, but they have a limited capacity to provide long term glycaemic control and can cause serious adverse effects. Thus, more efficacious and tolerable antidiabetic agents are required. Recent years have witnessed the introduction of agents with novel modes of action, that is, the alpha-glucosidase inhibitors acarbose and miglitol (which reduce postprandial hyperglycaemia) and the first of the thiazolidinedione insulinsensitising drugs -- troglitazone and rosiglitazone. Although the former has been withdrawn in some countries due to adverse effects, another 'glitazone' pioglitazone is expected to be approved in the near future. Other recently introduced drugs include glimepiride and the meglitinide insulin secretagoque, repaglinide. Attention is also focusing increasingly on combination therapy using insulin together with sulphonylureas, metformin or troglitazone. Rapid-acting insulin analogues are now being used as alternatives to conventional insulins; their role in the management of type 2 diabetes mellitus is presently uncertain but reports of a reduced frequency of hypoglycaemia are encouraging. The development of new drugs aims to counter the principal metabolic defects of the disorder, respectively, relative insulin deficiency and insulin resistance. Novel classes of rapid-acting secretagogues under evaluation include the morphilinoguanide BTS 67582 and the meglitinides mitiglinide (KAD 1229) and senaglinide (A-4166). Succinate ester derivatives represent a potential novel approach to improving beta-cell function through enhancement of insulin biosynthesis and secretion. Enhancement of nutrient-induced insulin

secretion is a mechanism with several putative targets within the beta-cell; potentiators of insulin secretion include glucagon-like peptide-1 and its analogues, phosphodiesterase inhibitors and the imidazoline derivative PMS 812 (S 21663). The amylin agonist pramlintide slows gastric emptying and suppression of glucagon secretion. Non-thiazolidinedione insulin-sensitising agents include the gamma-receptor agonist G 1262570X (GG 570) and D-chiroinositol. Insulin analogues with prolonged action and inhaled insulin preparations are also under investigation. Insulin-mimetic agents include organic vanadium compounds. Whether newer agents will offer clinically relevant efficacy and tolerability advantages over existing therapies remains to be determined.

CT Diabetes Mellitus, Type 2: DH, diet therapy *Diabetes Mellitus, Type 2: DT, drug therapy

Humans

Hypoglycemic Agents: AE, adverse effects Hypoglycemic Agents: CL, classification Hypoglycemic Agents: PD, pharmacology *Hypoglycemic Agents: TU, therapeutic use

CN 0 (Hypoglycemic Agents)

L61 ANSWER 41 OF 49 MEDLINE on STN

ACCESSION NUMBER: 97041658 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 8886929

TITLE: A rapid- and short-acting hypoglycemic agent KAD-1229

improves post-prandial

hyperglycemia and diabetic complications

in streptozotocin-induced non-insulin-dependent

diabetes mellitus rats.

AUTHOR: Ohnota H; Kitamura T; Kinukawa M; Hamano S; Shibata N;

Miyata H; Ujiie A

CORPORATE SOURCE: Central Research Laboratories, Kissei Pharmaceutical Co.,

Ltd., Nagano, Japan.

SOURCE: Japanese journal of pharmacology, (1996 Aug) Vol.

71, No. 4, pp. 315-23.

Journal code: 2983305R. ISSN: 0021-5198.

PUB. COUNTRY: Japan

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199701

ENTRY DATE: Entered STN: 19 Feb 1997

Last Updated on STN: 19 Feb 1997 Entered Medline: 30 Jan 1997

AB We investigated therapeutic effects of a rapid- and short-acting nonsulfonylurea hypoglycemic agent, calcium (2S)-2-benzyl-3-(cis- hexahydro-2isoindolinylcarbonyl)propionate dihydrate (KAD-1229), on streptozotocin (STZ)induced non-insulin-dependent diabetes mellitus (NIDDM) rats. The effects exerted by KAD-1229 on the post-prandial plasma glucose rise in STZ-induced mild NIDDM (mNIDDM) rats were different from those of sulfonylureas. KAD-1229 with liquid meal (10 kcal/kg) was given to the mNIDDM rats, the plasma glucose migration was similar to that of normal healthy rats. On the contrary, glibenclamide had little or no effect on the plasma glucose rise 0.5-1 hr after oral administration, and its effect was only evident 2-5 hr after dosing. Tolbutamide showed similar hypoglycemia to that induced by glibenclamide at 2-5 hr with insufficient efficacy at 0.5 hr. Gliclazide sufficiently suppressed the level of post-prandial plasma glucose. However, its complete inhibition of post-prandial plasma glucose was associated with the extra-hypoglycemia 1-5 hr after oral administration. We also tested the efficacy of KAD-1229 in more severe STZ-induced NIDDM (sNIDDM) rats to elucidate the effects of the drug on the long-term glycemic controls and

diabetic complications. When the sNIDDM rats were treated with 10 mg/kg KAD-1229 twice a day for about 17 weeks, increases in fasting plasma glucose and hemoglobin Alc were inhibited. Furthermore, treatment with KAD-1229 suppressed the development of microalbuminuria and cortical cataract. We conclude that the rapid- and short-acting insulinotropic agent KAD-1229 is able to improve the deterioration in the glycemic controls and inhibit the development of diabetic complications in STZ-induced NIDDM rats.

CT Check Tags: Male

Albuminuria: ME, metabolism

Analysis of Variance

Animals

Blood Glucose: ME, metabolism

Diabetes Mellitus, Experimental: BL, blood

*Diabetes Mellitus, Experimental: DT, drug therapy

Glucagon: BL, blood

Hyperglycemia: DT, drug therapy
*Hypoglycemic Agents: PD, pharmacology

*Indoles: PD, pharmacology

Insulin: BL, blood
Pancreas: CH, chemistry
Pancreas: EN, enzymology

Rats

Rats, Sprague-Dawley

Streptozocin

RN 11061-68-0 (Insulin); 18883-66-4 (Streptozocin); 9007-92-5 (Glucagon)

CN 0 (Blood Glucose); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (
 mitiglinide)

L61 ANSWER 42 OF 49 MEDLINE on STN

ACCESSION NUMBER: 95323823 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 7600439

TITLE: Normalization of impaired glucose tolerance by the

short-acting hypoglycemic agent calcium

(2S)-2-benzyl-3-(cis-hexahydro-2-

isoindolinylcarbonyl)propionate dihydrate (KAD-1229) in

non-insulin-dependent diabetes mellitus rats.

AUTHOR: Ohnota H; Koizumi T; Kobayashi M; Momose Y; Sato F

CORPORATE SOURCE: Creative Products Research Laboratory, Kissei

Pharmaceutical Co., Ltd., Nagano-ken, Japan.

SOURCE: Canadian journal of physiology and pharmacology, (1995

Jan) Vol. 73, No. 1, pp. 1-6.

Journal code: 0372712. ISSN: 0008-4212.

PUB. COUNTRY: Canada

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199508

ENTRY DATE: Entered STN: 22 Aug 1995

Last Updated on STN: 22 Aug 1995

Entered Medline: 7 Aug 1995

AB We have investigated the hypoglycemic effects of the newly synthesized short-acting nonsulphonylurea hypoglycemic agent calcium (2S)-2-benzyl-3-(cis-hexahydro-2-isoindolinylcarbonyl)-propionate dihydrate (KAD-1229) in non-insulin-dependent diabetes mellitus (NIDDM) rats. NIDDM rats that were given a neonatal injection of 60 mg/kg streptozotocin showed a dose-dependent but attenuated response to oral administration of KAD-1229 and gliclazide, and their impaired glucose tolerance was improved but not normalized. We next produced, using a neonatal injection of 30 mg/kg streptozotocin, a mild type of NIDDM rat with less impaired glucose tolerance. These rats responded well to these insulinotropic hypoglycemic agents. Their impaired glucose and meal

tolerance were completely normalized by oral administration of 3 mg/kg KAD-1229. The efficacy of KAD-1229 in this NIDDM rat model 1-3 h after oral glucose administration was comparable with similar doses of gliclazide, despite its shorter hypoglycemic action (compared with gliclazide), in fasting normal rats. In meal tolerance tests (20 kcal/kg; 1 cal = 4.2 J), KAD-1229 reduced abnormally enhanced plasma glucose levels 1-3 h after administration. This effect disappeared by 5 h. In contrast, gliclazide showed sustained hypoglycemic effects until 5 h after oral administration, with a lower postprandial (0.5-1 h) effect. These data indicated that the rapid- and shortacting efficacy of KAD-1229 would be beneficial and sufficient to control postprandial plasma glucose in NIDDM rats.

CT Animals

Animals, Newborn

*Blood Glucose: ME, metabolism

*Diabetes Mellitus, Experimental: BL, blood

Food

Gliclazide: PD, pharmacology

Glucose Tolerance Test

*Hypoglycemic Agents: PD, pharmacology

Immunohistochemistry

*Indoles: PD, pharmacology Pancreas: ME, metabolism

Rats

Rats, Sprague-Dawley

RN 21187-98-4 (Gliclazide)

CN 0 (Blood Glucose); 0 (Hypoglycemic Agents); 0 (Indoles); 0 (mitiglinide)

L61 ANSWER 43 OF 49 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN DUPLICATE 1

ACCESSION NUMBER:

2003324437 EMBASE Full-text

TITLE:

Sulphonylurea action revisited: The post-cloning era.

AUTHOR:

Gribble F.M.; Reimann F.

CORPORATE SOURCE:

Dr. F.M. Gribble, Department of Clinical Biochemistry,

Addenbrooke's Hospital, Box 232, Hills Road, Cambridge, CB2

2QR, United Kingdom. fmg23@cam.ac.uk

SOURCE:

Diabetologia, (1 Jul 2003) Vol. 46, No. 7, pp. 875-891. .

Refs: 163

ISSN: 0012-186X CODEN: DBTGAJ

COUNTRY:

Germany

DOCUMENT TYPE: FILE SEGMENT:

Journal; General Review
003 Endocrinology
006 Internal Medicine

030 Pharmacology

037 Drug Literature Index 038 Adverse Reactions Titles

LANGUAGE:

English English

SUMMARY LANGUAGE: ENTRY DATE:

Entered STN: 4 Sep 2003

Last Updated on STN: 4 Sep 2003

AB Hypoglycaemic agents such as sulphonylureas and the newer group of "glinides" stimulate insulin secretion by closing ATP-sensitive potassium (K(ATP)) channels in pancreatic beta cells, but have varying cross-reactivity with related channels in extrapancreatic tissues such as heart, vascular smooth and skeletal muscle. Experiments on the structure-function relationships of recombinant K(ATP) channels and the phenotypes of mice deficient in different K(ATP) channel subunits have provided important insights into the mechanisms underlying sulphonylurea selectivity, and the potential consequences of K(ATP) channel blockade outside the pancreatic beta cell. The different pharmacological properties of K(ATP) channels from beta cells compared with

those from cardiac, smooth and skeletal muscle, are accounted for by the expression of alternative types of sulphonylurea receptor, with non-identical drug binding sites. The sulphonylureas and glinides are found to fall into two groups: one exhibiting selectivity for beta cell sulphonylurea receptors (SUR1), and the other blocking cardiovascular and skeletal muscle sulphonylurea receptors (SUR2) with potencies similar to their action on SUR1. In seeking potential side effects of K(ATP) channel inhibitors in humans, it is essential to take these drug differences into account, along with the probability (suggested by the studies on K(ATP) channel knockout mice) that the effects of extrapancreatic K(ATP) channel inhibition might be either subtle or rare. Further studies are still required before a final decision can be made on whether non-selective agents are appropriate for the therapy of

CT

```
Type 2 diabetes.
Medical Descriptors:
  *non insulin dependent diabetes mellitus: DT, drug therapy
drug mechanism
drug effect
drug receptor binding
insulin release
inwardly rectifying potassium channel
pancreas islet beta cell
cross reaction
heart
vascular smooth muscle
skeletal muscle
phenotype
drug selectivity
protein expression
drug binding site
drug potency
side effect: SI, side effect
knockout mouse
medical decision making
cloning
human
nonhuman
review
priority journal
Drug Descriptors:
*sulfonylurea: AE, adverse drug reaction
*sulfonylurea: IT, drug interaction
*sulfonylurea: DT, drug therapy
*sulfonylurea: PD, pharmacology
tolbutamide: DT, drug therapy
tolbutamide: PD, pharmacology
gliclazide: DT, drug therapy
gliclazide: PD, pharmacology
  mitiglinide: DT, drug therapy
  mitiglinide: PD, pharmacology
glibenclamide: DT, drug therapy
glibenclamide: PD, pharmacology
glimepiride: DT, drug therapy
glimepiride: PD, pharmacology
repaglinide: DT, drug therapy
repaglinide: PD, pharmacology
insulin: EC, endogenous compound
adenosine triphosphate
sulfonylurea receptor: EC, endogenous compound
receptor subtype: EC, endogenous compound
chlorpropamide: DT, drug therapy
```

```
chlorpropamide: PD, pharmacology
     meglitinide: DT, drug therapy
     meglitinide: PD, pharmacology
     nateglinide: DT, drug therapy
     nateglinide: PD, pharmacology
     diazoxide: IT, drug interaction
     diazoxide: PD, pharmacology
     nicorandil: DT, drug therapy
     nicorandil: PD, pharmacology
     pinacidil
     cromakalim
ВN
     (tolbutamide) 473-41-6, 64-77-7; (gliclazide) 21187-98-4; (
    mitiglinide) 145525-41-3, 207844-01-7; (glibenclamide)
     10238-21-8; (glimepiride) 93479-97-1; (repaglinide) 135062-02-1; (insulin)
     9004-10-8; (adenosine triphosphate) 15237-44-2, 56-65-5, 987-65-5;
     (chlorpropamide) 94-20-2; (meglitinide) 54870-28-9; (nateglinide)
     105746-37-0, 105816-04-4, 105816-06-6; (diazoxide) 364-98-7; (nicorandil)
     65141-46-0; (pinacidil) 60560-33-0; (cromakalim) 94470-67-4
L61 ANSWER 44 OF 49
                      EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
                    2003422728 EMBASE
ACCESSION NUMBER:
                                          Full-text
                    [Current oral agents for type 2 diabetes].
TITLE:
                    TIP 2 DIYABETTE GUNCEL ORAL AJANLAR.
AUTHOR:
                    Stoller W.A.
SOURCE:
                    SENDROM, (2003) Vol. 15, No. 6, pp. 24-33. .
                    Refs: 22
                    ISSN: 1016-5134 CODEN: SENDEY
COUNTRY:
                    Turkey
DOCUMENT TYPE:
                    Journal; General Review
FILE SEGMENT:
                    003
                            Endocrinology
                    017
                            Public Health, Social Medicine and Epidemiology
                    037
                            Drug Literature Index
                    038
                            Adverse Reactions Titles
LANGUAGE:
                    Turkish
SUMMARY LANGUAGE:
                    English; Turkish
ENTRY DATE:
                    Entered STN: 6 Nov 2003
                    Last Updated on STN: 6 Nov 2003
     Type 2 diabetes has reached epidemic levels in the United States. Progressive
AB
     evidence has emphasized the importance of glucose control in avoiding the high
     costs and reduced quality of life associated with the numerous complications
     of diabetes. Fortunately, pharmacologic options for treating type 2 diabetes
     have increased dramatically during the last 6 years, allowing new
     opportunities for successful outcomes. Such options will continue to expand.
     Therefore we are challenged to effectively use these agents in a logical
     progressive regimen while minimizing side effects.
CT
     Medical Descriptors:
       *non insulin dependent diabetes mellitus: DT, drug therapy
       *non insulin dependent diabetes mellitus: EP, epidemiology
     United States
     quality of life
     cost of illness
     pathophysiology
     hypoglycemia: SI, side effect
     meteorism: SI, side effect
     anorexia: SI, side effect
     side effect: SI, side effect
     human
     review
     Drug Descriptors:
```

```
*oral antidiabetic agent: AE, adverse drug reaction
     *oral antidiabetic agent: DT, drug therapy
     *oral antidiabetic agent: PO, oral drug administration
     sulfonylurea: AE, adverse drug reaction
     sulfonylurea: DT, drug therapy
     sulfonylurea: PO, oral drug administration
     glibenclamide: DT, drug therapy
     glibenclamide: PO, oral drug administration
     glimepiride: DT, drug therapy
     glimepiride: PO, oral drug administration
     glipizide: DT, drug therapy
     glipizide: PO, oral drug administration
     repaglinide: AE, adverse drug reaction
     repaglinide: DT, drug therapy
     repaglinide: PO, oral drug administration
       mitiglinide: DT, drug therapy
       mitiglinide: PO, oral drug administration
     nateglinide: AE, adverse drug reaction
     nateglinide: DT, drug therapy
     nateglinide: PO, oral drug administration
       alpha glucosidase inhibitor: DT, drug therapy
       alpha glucosidase inhibitor: PO, oral drug administration
     metformin: AE, adverse drug reaction
     metformin: DT, drug therapy
     metformin: PO, oral drug administration
     insulin: DT, drug therapy
     peroxisome proliferator activated receptor agonist: AE, adverse drug
     reaction
     peroxisome proliferator activated receptor agonist: DT, drug therapy
     peroxisome proliferator activated receptor agonist: PO, oral drug
     administration
     pioglitazone: DT, drug therapy
     pioglitazone: PO, oral drug administration
     rosiglitazone: DT, drug therapy
     rosiglitazone: PO, oral drug administration
     human insulin: DT, drug therapy
     insulin glargine: DT, drug therapy
     hemoglobin A1c: EC, endogenous compound
     acarbose: AE, adverse drug reaction
     acarbose: DT, drug therapy
     acarbose: PO, oral drug administration
     miglitol: AE, adverse drug reaction
     miglitol: DT, drug therapy
     miglitol: PO, oral drug administration
     glibenclamide plus metformin
     starfix
     (glibenclamide) 10238-21-8; (glimepiride) 93479-97-1; (glipizide)
     29094-61-9; (repaglinide) 135062-02-1; (mitiglinide)
     145525-41-3, 207844-01-7; (nateglinide) 105746-37-0,
     105816-04-4, 105816-06-6; (metformin) 1115-70-4, 657-24-9; (insulin)
     9004-10-8; (pioglitazone) 105355-27-9, 111025-46-8; (rosiglitazone)
     122320-73-4, 155141-29-0; (human insulin) 11061-68-0; (insulin glargine)
     160337-95-1; (hemoglobin Alc) 62572-11-6; (acarbose) 56180-94-0;
     (miglitol) 72432-03-2
     Humulin; Novolin; Lantus; Glucovance; Prandin; Starfix; Precose; Glyset
L61 ANSWER 45 OF 49 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    2004050138 EMBASE
                                          Full-text
                    World Congress of Pharmacology - XIVth Annual Meeting: New
TITLE:
```

RN

CN

10/519155 drugs I: 7-12 July 2002, San Francisco, CA, USA. AUTHOR: Waterworth C.; Durrance A. CORPORATE SOURCE: C. Waterworth, Current Drugs Ltd., Middlesex House, 34-42 Cleveland Street, London W1T 4LB, United Kingdom. charlotte.waterworth@current.drugs.com SOURCE: IDrugs, (2002) Vol. 5, No. 8, pp. 745-748. . ISSN: 1369-7056 CODEN: IDRUFN COUNTRY: United Kingdom DOCUMENT TYPE: Journal; Conference Article FILE SEGMENT: 037 Drug Literature Index 029 Clinical Biochemistry 025 Hematology 030 Pharmacology 018 Cardiovascular Diseases and Cardiovascular Surgery LANGUAGE: English ENTRY DATE: Entered STN: 12 Feb 2004 Last Updated on STN: 12 Feb 2004 CT Medical Descriptors: human clinical trial nonhuman protein targeting thrombocyte aggregation kidney function diabetes mellitus Alzheimer disease drug potency drug activity drug structure drug dose regimen thrombosis: DT, drug therapy atherosclerosis: DT, drug therapy drug effect obesity: DT, drug therapy dose response area under the curve cognitive defect: DT, drug therapy drug metabolism drug half life drug bioavailability drug blood level glaucoma: DT, drug therapy tumor: DT, drug therapy conference paper CTDrug Descriptors: *new drug: PD, pharmacology *new drug: AN, drug analysis *new drug: DO, drug dose *new drug: CM, drug comparison *new drug: DT, drug therapy *new drug: PO, oral drug administration *new drug: CT, clinical trial *new drug: PK, pharmacokinetics *new drug: CR, drug concentration purine P2Y receptor: EC, endogenous compound antithrombocytic agent: PD, pharmacology

antithrombocytic agent: AN, drug analysis antithrombocytic agent: DO, drug dose

antithrombocytic agent: CM, drug comparison antithrombocytic agent: DT, drug therapy

```
dinucleoside polyphosphate inhibitor: PD, pharmacology
  dinucleoside polyphosphate inhibitor: AN, drug analysis
  dinucleoside polyphosphate inhibitor: DO, drug dose
  dinucleoside polyphosphate inhibitor: CM, drug comparison
  dinucleoside polyphosphate inhibitor: DT, drug therapy
peroxisome proliferator activated receptor agonist: DT, drug therapy
peroxisome proliferator activated receptor agonist: PD, pharmacology
peroxisome proliferator activated receptor agonist: CM, drug comparison
peroxisome proliferator activated receptor agonist: AN, drug analysis
acetylsalicylic acid 3 (nitroxymethyl)phenyl ester: DT, drug therapy
acetylsalicylic acid 3 (nitroxymethyl)phenyl ester: CM, drug comparison
acetylsalicylic acid 3 (nitroxymethyl)phenyl ester: PD, pharmacology
  mitiglinide: DT, drug therapy
  mitiglinide: PD, pharmacology
 mitiglinide: PK, pharmacokinetics
 mitiglinide: DO, drug dose
  mitiglinide: AN, drug analysis
peptide derivative: DT, drug therapy
peptide derivative: CT, clinical trial
peptide derivative: PD, pharmacology
peptide derivative: AN, drug analysis
noopept: DT, drug therapy
noopept: CT, clinical trial
noopept: PD, pharmacology
noopept: AN, drug analysis
pirfenidone: DT, drug therapy
pirfenidone: CT, clinical trial
pirfenidone: PK, pharmacokinetics
pirfenidone: IV, intravenous drug administration
pirfenidone: DO, drug dose
pirfenidone: AN, drug analysis
nitronaproxen: DT, drug therapy
nitronaproxen: PK, pharmacokinetics
nitronaproxen: PO, oral drug administration
nitronaproxen: CR, drug concentration
nitronaproxen: PD, pharmacology
nitronaproxen: AN, drug analysis
6 chloro 2 [(1 furo[2,3 c]pyridin 5 ylethyl)thio] 4 pyrimidinamine: DT,
drug therapy
6 chloro 2 [(1 furo[2,3 c]pyridin 5 ylethyl)thio] 4 pyrimidinamine: CT,
clinical trial
6 chloro 2 [(1 furo[2,3 c]pyridin 5 ylethyl)thio] 4 pyrimidinamine: AN,
drug analysis
2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid: DT,
drug therapy
2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid: PD,
pharmacology
2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid: CT,
clinical trial
2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid: DO,
drug dose
2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid: PK,
pharmacokinetics
antiglaucoma agent: DT, drug therapy
antiglaucoma agent: CT, clinical trial
antiglaucoma agent: PD, pharmacology
antineoplastic agent: DT, drug therapy
antineoplastic agent: PD, pharmacology
nitrostyrene derivative: DT, drug therapy
nitrostyrene derivative: PD, pharmacology
```

```
endothelin converting enzyme inhibitor: DT, drug therapy
  endothelin converting enzyme inhibitor: PD, pharmacology
cgs 35066: DT, drug therapy
cgs 35066: PD, pharmacology
bis (7 tacrine): DT, drug therapy
bis (7 tacrine): PD, pharmacology
bis (7 tacrine): AN, drug analysis
bis (7 tacrine): DO, drug dose
conivaptan: DT, drug therapy
conivaptan: .PD, pharmacology
conivaptan: CB, drug combination
conivaptan: AN, drug analysis
conivaptan: CM, drug comparison
conivaptan: DO, drug dose
carbamic acid derivative: PD, pharmacology
carbamic acid derivative: AN, drug analysis
carbamic acid derivative: DO, drug dose
carbamic acid derivative: CM, drug comparison
carbamic acid derivative: DT, drug therapy
diquafosol: PD, pharmacology
diquafosol: CM, drug comparison
diquafosol: DT, drug therapy
ns 220: DT, drug therapy
ns 220: PD, pharmacology
ns 220: CM, drug comparison
ns 220: AN, drug analysis
fenofibrate: DT, drug therapy
fenofibrate: PD, pharmacology
fenofibrate: CM, drug comparison
acetylsalicylic acid: DT, drug therapy
acetylsalicylic acid: CM, drug comparison
acetylsalicylic acid: PD, pharmacology
a 331440: DT, drug therapy
a 331440: PO, oral drug administration
a 331440: DO, drug dose
a 331440: CM, drug comparison
a 331440: PD, pharmacology
dexfenfluramine: DT, drug therapy
dexfenfluramine: CM, drug comparison
dexfenfluramine: PD, pharmacology
thioperamide: DT, drug therapy
thioperamide: CM, drug comparison
thioperamide: PD, pharmacology
ciprofloxacin: DT; drug therapy
ciprofloxacin: CM, drug comparison
ciprofloxacin: PD, pharmacology
unindexed drug
unclassified drug
ins 48372
ins 46116
ins 46117
ins 46061
ins 46058
ins 48795
ins 40150
ins 40270
ins 46060
ins 49162
ins 46059
s 35836 1
```

s 35678 1 qvs 111 ot 7999 (acetylsalicylic acid 3 (nitroxymethyl)phenyl ester) 190442-10-5; (RN mitiglinide) 145525-41-3, 207844-01-7; (pirfenidone) 53179-13-8; (nitronaproxen) 163133-43-5; (2,4 dimethyl 5 (2 oxo 1h indol 3 ylmethylene) 3 pyrrolepropionic acid) 252916-29-3; (conivaptan) 168626-94-6, 210101-16-9; (diquafosol) 211427-08-6; (fenofibrate) 49562-28-9; (acetylsalicylic acid) 493-53-8, 50-78-2, 53663-74-4, 53664-49-6, 63781-77-1; (dexfenfluramine) 3239-44-9, 3239-45-0; (thioperamide) 106243-16-7; (ciprofloxacin) 85721-33-1 (1) Ins 48372; (2) Ins 46116; (3) Ins 46117; (4) Ins 46061; (5) Ins 46058; CN (6) Ins 48795; (7) Ins 40150; (8) Ins 40270; (9) Ins 46060; (10) Ins 49162; (11) Ins 46059; (12) Ins 365; (13) Ns 220; (14) A 331440; (15) Kad 1229; (16) Kad 1229; (17) S 35836 1; (18) S 35678 1; (19) Kad 1229; (20) Gvs 111; (21) Azd 3582; (22) Azd 3582; (23) Ncx 4016; (24) Pnu 142721; (25) Su 6668; (26) Ot 7999; (27) Cgs 35066; (28) Ym 087; (29) Ym 087; (30) Amr 69; (31) Amr 69; (32) Amr 69; (33) Amr 69 (12) Inspire; (13) Nippon Shinyaku; (14) Abbott; (15) Kissei; (18) Servier; (19) Takeda; (20) Russian Academy of Sciences; (21) Astra Zeneca; (23) Nicox; (24) Pharmacia (United States); (25) Sugen; (26) Otsuka; (27) Novartis; (28) Yamanouchi; (29) Pfizer; (30) Marnac; (31) Intermune; (32) Schering AG; (33) Shionogi; UCB ANSWER 46 OF 49 DRUGU COPYRIGHT 2007 THE THOMSON CORP on STN ACCESSION NUMBER: 2003-08972 DRUGU TSE Full-text TITLE: Diabetes and insulin resistance associated disorders: disease and the therapy. Chakrabarti R; Rajagopalan R AUTHOR: CORPORATE SOURCE: Dr.Reddy's-Lab. LOCATION: Hyderabad, India SOURCE: Curr.Sci. (83, No. 12, 1533-38, 2002) 2 Fig. 2 Tab. 18 Ref. CODEN: CUSCAM ISSN: 0011-3891 AVAIL. OF DOC.: Dr. Reddy's Laboratories Ltd., Discovery Research, Bollaram Road, Miyapur, Hyderabad 500 050, India. (R.R.). (e-mail: rajagopalanr@drreddys.com). LANGUAGE: English DOCUMENT TYPE: Journal FIELD AVAIL.: AB; LA; CT FILE SEGMENT: Literature The therapy of diabetes and insulin resistance associated disorders are reviewed. Topics covered are classes of currently available drugs and future targets. Established drugs and those in trials discussed are acetohexamide, chlorpropamide, tolbutamide, tolazamide, glyburide, glipizide, glimiperide, repaglinide, nateglinide, glibenclamide, mitiglinide, metformin, phenformin, ciglitazone, troglitazone, rosiglitazone, pioglitazone, acarbose, miglitol (side-effects of these drugs were also mentioned), balaglitazone, natoglitazone, ragaglitazar, tesaglitazar, KRP-297, BMS-298585, regaglitazar, SR-58611, TAK-677, GP-3034, LAF-237, P-32-98, DPP-728 and NN-2211. Current research efforts are focussed on insulin sensitizers, PPAR agonists, protein tyrosine phosphatase inhibitors, beta-3 adrenoceptor agonists, inhibitors of hepatic glucose output and insulin secretagogues. (No EX). 2003-08972 DRUGU T S E AN Full-text T Therapeutics S Adverse Effects E Endocrinology 12 Antidiabetics 35 Adverse Reactions 64 Clinical Trials

69 Reviews

- 73 Trial Preparations CTDIABETES *TR; CARBOHYDRATE-METAB.DISORDER *TR; PANCREOPATHY *TR; CASES *FT; IN-VIVO *FT; ANTIDIABETIC *FT; CLIN.TRIAL *FT; REVIEW *FT
 - [01] MAIN-TOPIC *FT; ANTIDIABETICS *FT; TR *FT; AE *FT
 - [02] ACETOHEXAMIDE *TR; CHLORPROPAMIDE *TR; TOLBUTAMIDE *TR; TOLAZAMIDE *TR; GLIBENCLAMIDE *TR; GLIPIZIDE *TR; GLIMIPERIDE *TR; REPAGLINIDE *TR; NATEGLINIDE *TR; GLIBENCLAMIDE *TR; MITIGLINIDE *TR; METFORMIN *TR; PHENFORMIN *TR; CIGLITAZONE *TR; TROGLITAZONE *TR; ROSIGLITAZONE *TR; PIOGLITAZONE *TR; ACARBOSE *TR; MIGLITOL *TR; BALAGLITAZONE *TR; NATOGLITAZONE *TR; RAGAGLITAZAR *TR; TESAGLITAZAR *TR; KRP-297 *TR; BMS-298585 *TR; REGAGLITAZAR *TR; SR-58611 *TR; TAK-677 *TR; GP-3034 *TR; LAF-237 *TR; P-32-98 *TR; DPP-728 *TR; NN-2211 *TR; TR *FT
 - [03] ACETOHEXAMIDE *AE; CHLORPROPAMIDE *AE; TOLBUTAMIDE *AE; TOLAZAMIDE *AE; GLIBENCLAMIDE *AE; GLIPIZIDE *AE; GLIMIPERIDE *AE; REPAGLINIDE *AE; NATEGLINIDE *AE; GLIBENCLAMIDE *AE; MITIGLINIDE *AE; METFORMIN *AE; PHENFORMIN *AE; CIGLITAZONE *AE; TROGLITAZONE *AE; ROSIGLITAZONE *AE; PIOGLITAZONE *AE; ACARBOSE *AE; MIGLITOL *AE; BALAGLITAZONE *AE; NATOGLITAZONE *AE; RAGAGLITAZAR *AE; TESAGLITAZAR *AE; KRP-297 *AE; BMS-298585 *AE; REGAGLITAZAR *AE; SR-58611 *AE; TAK-677 *AE; GP-3034 *AE; LAF-237 *AE; P-32-98 *AE; DPP-728 *AE; NN-2211 *AE; AE *FT

ANSWER 47 OF 49 DRUGU COPYRIGHT 2007 THE THOMSON CORP on STN L61

ACCESSION NUMBER: 2002-33933 DRUGU ΡЕ Full-text

TITLE: Clinical pharmacokinetics and pharmacodynamics of

repaglinide.

AUTHOR:

Hatorp V

LOCATION:

Hoersholm, Den.

SOURCE:

Clin. Pharmacokinet. (41, No. 7, 471-83, 2002) 5 Fig. 4 Tab.

48 Ref.

ISSN: 0312-5963 CODEN: CPKNDH

AVAIL. OF DOC.:

Danish Toxicology Center, Kogle Alle 2, DK-2970 Hoersholm,

Denmark. (e-mail: vh@dtc.dk).

LANGUAGE: English DOCUMENT TYPE: Journal FIELD AVAIL .: AB; LA; CT FILE SEGMENT: Literature

AB Clinical pharmacokinetics and pharmacodynamics of repaglinide (RP) are reviewed. The pharmacokinetics of RP in healthy volunteers, patients with type 2 diabetes, and in special populations (hepatic and renal insufficiency) are analyzed. Drug-drug interactions are presented with reference to protein binding interactions and in-vivo interactions with cimetidine, digoxin, theophylline, warfarin, and rifampicin. Finally, the pharmacodynamics of RP are discussed in relation to dose tolerance, dose response and dosage regimen.

AN 2002-33933 DRUGU P E Full-text

- P Pharmacology
- E Endocrinology
- 8 Pharmacokinetics
- 12 Antidiabetics
- 66 Drug Interactions
- 69 Reviews
- CT CASES *FT; HUMAN *FT; IN-VIVO *FT; REVIEW *FT; PHARMACOKINETICS *FT; PHARMACODYNAMICS *FT; ANTIDIABETIC *FT
 - [01] REPAGLINIDE *PH; REPAGLINIDE *DM; AGEE623ZW *RN; MAIN-TOPIC *FT; ANTIDIABETICS *FT; PH *FT; DM *FT
 - RN: 135062-02-1
 - [02] NATEGLINIDE *PH; MITIGLINIDE *PH; KETOCONAZOLE *DI;

RIFAMPICIN *DI; CIMETIDINE *DI; DIGOXIN *DI; THEOPHYLLINE *DI; WARFARIN *DI; PH *FT; DI *FT

L61 ANSWER 48 OF 49 DRUGU COPYRIGHT 2007 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-11212 DRUGU P E Full-text

TITLE: Sulfonylurea stimulation of insulin secretion.

AUTHOR: Proks P; Reimann F; Green N; Gribble F; Ashcroft F

CORPORATE SOURCE: Univ.Oxford; Univ.Cambridge LOCATION: Oxford; Cambridge, U.K.

SOURCE: Diabetes (51, Suppl. 3, S368-S376, 2002) 4 Fig. 1 Tab. 55

Ref.

CODEN: DIAEAZ ISSN: 0012-1797

AVAIL. OF DOC.: University Laboratory of Physiology, Parks Road, Oxford OX1

3PT, England. (F.A.). (e-mail: frances.ashcroft@physiol.ox.ac

.uk).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

Sulfonylurea stimulation of insulin secretion is reviewed. The inhibition of KATP channels by imidazolines (phentolamine, cibenzoline), antimalarials (quinine, mefloquine), sulfonylureas (tolbutamide, gliclazide, glimepiride), and benzamido derivatives and the specificity of high-affinity sulfonylurea block are discussed. The location of the sulfonylurea binding site on SUR and interactions between Kir6.1 and SUR are explained. Modulation of sulfonylurea block by PIP2 and modulation of sulfonylurea block by MG nucleotides are considered. Findings indicate that the classification of sulfonylureas, meglitinide derivatives ect can be changed to reflect the functional differences among these drugs, and that they be referred to instead as SUR1-specific and non-SUR1-specific. (conference paper: 3rd Servier - IGIS Symposium, St. Jean Cap Ferrat, France, 2002).

AN 2003-11212 DRUGU P E Full-text

P Pharmacology

- E Endocrinology
- 12 Antidiabetics
- 69 Reviews

CT REVIEW *FT; INSULIN *FT; PANCREAS-HORMONE-METAB. *FT; ANTIDIABETIC *FT; MODE-OF-ACT. *FT; IN-VIVO *FT; LAB.ANIMAL *FT

- [01] MAIN-TOPIC *FT; ANTIDIABETICS *FT; PH *FT
- [02] PHENTOLAMINE *PH; CIBENZOLINE *PH; QUININE *PH; MEFLOQUINE *PH; TOLBUTAMIDE *PH; GLICLAZIDE *PH; GLIMEPIRIDE *PH; MEGLITINIDE *PH; MITIGLINIDE *PH; NATEGLINIDE *PH; GLIBENCLAMIDE *PH; GLIPIZIDE *PH; REPAGLINIDE *PH; PH *FT

L61 ANSWER 49 OF 49 DRUGU COPYRIGHT 2007 THE THOMSON CORP on STN

ACCESSION NUMBER: 2001-42236 DRUGU P T E <u>Full-text</u> TITLE: Insulinotropic maglitinide analogues.

AUTHOR: Dornhorst A
CORPORATE SOURCE: Univ.London
LOCATION: London, U.K.

SOURCE: Lancet (358, No. 9294, 1709-16, 2001) 3 Fig. 78 Ref.

CODEN: LANCAO ISSN: 0140-6736

AVAIL. OF DOC.: Department of Metabolic Medicine, Faculty of Medicine,

Imperial College, Hammersmith Hospital Campus, Du Cane Road,

London W12 ONN, England. (e-mail: a.dornhorst@ic.ac.uk).

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

AB Insulinotropic maglitinide analogs are reviewed in terms of the pathophysiology of type 2 diabetes and the importance of beta cell function, defects in insulin pulsatility and early-phase insulin secretion in those at risk of type 2 diabetes. Pharmacological approaches to type 2 diabetes are discussed and the mechanism of action, efficacy in clinical trials, combination therapy and pharmacokinetics, safety and tolerability of repaglinide and nateglinide are explored in detail. The ability to preserve beta cell function is compared in nateglinide and glibenclamide. Mitiglinide is also briefly considered along with an evaluation of recent mixed molecules such as BTS-67582. Understanding of the pathophysiology of type 2 diabetes is now clearer and this knowledge is beginning to yield new agents of therapeutic promise such as repaglinide and nateglinide. ΑN

2001-42236 DRUGU P T E Full-text

- P Pharmacology
- T Therapeutics
- E Endocrinology
- 12 Antidiabetics
- 64 Clinical Trials
- 69 Reviews
- CT DIABETES *TR; CARBOHYDRATE-METAB.DISORDER *TR; PANCREOPATHY *TR; REVIEW *FT; IN-VITRO *FT; IN-VIVO *FT; CASES *FT; LAB.ANIMAL *FT; BETA-CELL *FT; PHARMACOKINETICS *FT; MODE-OF-ACT. *FT; INSULIN *FT; CARBOHYDRATE-METAB. *FT; CLIN.TRIAL *FT; COMB. *FT; ANTIDIABETIC *FT; PANCREAS *FT
 - [01] MAIN-TOPIC *FT; ANTIDIABETICS *FT; TR *FT; PH *FT
 - [02] MEGLITINIDE *TR; REPAGLINIDE *TR; METFORMIN *TR; TROGLITAZONE *TR; NATEGLINIDE *TR; MITIGLINIDE *TR; BTS-67582 *TR; S-21663 *PH; S-2166 *PH; JTT-608 *PH; MEGLITINIDE *PH; REPAGLINIDE *PH; METFORMIN *PH; TROGLITAZONE *PH; NATEGLINIDE *PH; MITIGLINIDE *PH; BTS-67582 *PH; GLIBENCLAMIDE *PH; TR *FT; PH *FT

***** INVENTOR RESULTS *****

(FILE 'HCAPLUS' ENTERED AT 14:40:20 ON 24 MAY 2007)

=> d his 142

L42 6 S L41 NOT L33 => d que 142 L41 SEA FILE=REGISTRY ABB=ON PLU=ON 145375-43-5/RN 1 SEA FILE=REGISTRY ABB=ON PLU=ON 207844-01-7/RN L5 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON MITIGLINIDE/CN 2 SEA FILE=REGISTRY ABB=ON PLU=ON (L4 OR L5 OR L6) L8 97 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR MITIGLINIDE CALCIUM L9 HYDRATE/OBI 87 SEA FILE=HCAPLUS ABB=ON PLU=ON MITIGLINIDE/OBI OR MITI/OBI(W) L10 GLINIDE/OBI L11 108 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 OR L10 2160940 SEA FILE=HCAPLUS ABB=ON PLU=ON (INHIBIT?/OBI OR HINDER?/OBI L13 OR IMPED?/OBI OR REDUC?/OBI OR REDN#/OBI OR SUPPRESS?/OBI OR PREVENT?/OBI OR BLOCK?/OBI OR ELIMINAT?/OBI) 110617 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABET?/OBI L19 54 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L19 L20 28 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 (5A) L20 L22 QUE ABB=ON PLU=ON AY<2004 OR PRY<2004 OR PY<2004 OR MY L23 <2004 OR REVIEW/DT 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L23 271 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI (3A) L24 L27 (POST/OBI(W) PRANDIAL/OBI OR POSTPRANDIAL/OBI) 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L27 L28 13237 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI L29 13237 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 OR L29 L30 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L30 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 OR L31 L31 L32 L33 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L24 L34 15 SEA FILE=HCAPLUS ABB=ON PLU=ON "MIKOSHIBA IMAO"/AU 328 SEA FILE=HCAPLUS ABB=ON PLU=ON SUZUKI HISAO/AU L35 9 SEA FILE=HCAPLUS ABB=ON PLU=ON KIYONO YUJI/AU L36 346 SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35 OR L36) L37 673 SEA FILE=HCAPLUS ABB=ON PLU=ON ("KISSEI PHARMACEUTICAL"/CO L38 OR "KISSEI PHARMACEUTICAL"/PA OR "KISSEI PHARMACEUTICAL"/CS OR "KISSEI PHARMACEUTICAL CO"/CO OR "KISSEI PHARMACEUTICAL CO LTD"/CO OR "KISSEI PHARMACEUTICAL CO LTD"/PA OR "KISSEI PHARMACEUTICAL CO LTD"/CS OR "KISSEI PHARMACEUTICAL CO LTD CENTRAL RESEARCH LABORATORIES"/CO OR "KISSEI PHARMACEUTICAL CO LTD CENTRAL RESEARCH LABORATORIES HOTAKA 399 83 JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD JAPAN"/PA OR "KISSEI PHARMACEUTIC AL CO LTD JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD NAGANO 399 8304 JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD PHARMACEUTI CAL RESEARCH LABORATORIES"/CO OR "KISSEI PHARMACEUTICAL CO LTD PHARMACEUTICAL RESEARCH LABORATORIES NAGANO 399 8304 JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD SHINSHU UNIVERSITY"/CO OR "KISSEI PHARMACEUTICAL COMPANY"/CO OR "KISSEI PHARMACEUTICAL COMPANY LIMITED"/CO OR "KISSEI PHARMACEUTICAL COMPANY LTD"/CO OR "KISSEI PHARMACEUTICAL INDUSTRY CO LTD"/CO OR "KISSEI PHARMACEUTICAL JAPAN"/PA OR "KISSEI PHARMACEUTICAL JAPAN"/CS) L39 722 SEA FILE=HCAPLUS ABB=ON PLU=ON KISSEI PHARMA?/PA,CS,CO L40 722 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 OR L39 8 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 AND L40 L41 L42 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L41 NOT L33

=> d his 160

```
(FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 14:54:53 ON 24 MAY 2007)
L60
              6 S L59 NOT L49
=> d que 160
              1 SEA FILE=REGISTRY ABB=ON PLU=ON 145375-43-5/RN
              1 SEA FILE=REGISTRY ABB=ON PLU=ON 207844-01-7/RN
L5
             1 SEA FILE=REGISTRY ABB=ON PLU=ON MITIGLINIDE/CN
2 SEA FILE=REGISTRY ABB=ON PLU=ON (L4 OR L5 OR L6)
L6
L8
             87 SEA FILE=HCAPLUS ABB=ON PLU=ON MITIGLINIDE/OBI OR MITI/OBI(W)
L10
                GLINIDE/OBI
      2160940 SEA FILE=HCAPLUS ABB=ON PLU=ON (INHIBIT?/OBI OR HINDER?/OBI
L13
                OR IMPED?/OBI OR REDUC?/OBI OR REDN#/OBI OR SUPPRESS?/OBI OR
                PREVENT?/OBI OR BLOCK?/OBI OR ELIMINAT?/OBI)
L19
         110617 SEA FILE=HCAPLUS ABB=ON PLU=ON DIABET?/OBI
L23
                QUE ABB=ON PLU=ON AY<2004 OR PRY<2004 OR PY<2004 OR MY
                <2004 OR REVIEW/DT
            271 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI (3A)
L27
                (POST/OBI(W) PRANDIAL/OBI OR POSTPRANDIAL/OBI)
          13237 SEA FILE=HCAPLUS ABB=ON PLU=ON HYPERGLYCEM?/OBI
L29
L43
            84 SEA L8
L44
            172 SEA L10
L45
            10 SEA MITIGLINIDE CALCIUM HYDRATE
           173 SEA (L43 OR L44 OR L45)
L46
          110 SEA L46 AND (L19 OR L27 OR L29)
L47
            46 SEA L47 AND L23 ·
L48
            33 SEA L48 (P) L13
L49
L50
            27 SEA MIKOSHIBA I?/AU
L52
           34 SEA SUZUKI HISAO/AU
            2 SEA KIYONO YUJI/AU
L53
           63 SEA L50 OR L52 OR L53
L54
            2 SEA L50 AND L52 OR L53
2 SEA L54 AND L46
L55
L56
            2 SEA L55 OR L56
L57
            6 SEA L54 AND (L19 OR L27 OR L29)
L58
            6 SEA L57 OR L58
6 SEA L59 NOT L49
L59
L60
=> dup rem 142 160
PROCESSING COMPLETED FOR L42
PROCESSING COMPLETED FOR L60
             10 DUP REM L42 L60 (2 DUPLICATES REMOVED)
                ANSWERS '1-6' FROM FILE HCAPLUS
                ANSWER '7' FROM FILE MEDLINE
                ANSWER '8' FROM FILE BIOSIS
                ANSWER '9' FROM FILE EMBASE
                ANSWER '10' FROM FILE DRUGU
=> d 162 1-6 ibib abs
L62 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2004:836630 HCAPLUS Full-text
DOCUMENT NUMBER:
                         142:384723
TITLE:
                         Pharmacological and clinical profile of mitiglinide
                         calcium hydrate (Glufast), a new insulinotropic agent
                         with rapid onset
AUTHOR (S):
                         Ojima, Kazuma; Kiyono, Yuji; Kojima, Masami
```

CORPORATE SOURCE: Pharmacol. Res. Lab. R & D, Kissei Pharm. Co.,

Ltd., Nagano, 399-8304, Japan

SOURCE: Nippon Yakurigaku Zasshi (2004), 124(4), 245-255

CODEN: NYKZAU; ISSN: 0015-5691

PUBLISHER: Nippon Yakuri Gakkai DOCUMENT TYPE: Journal; General Review

LANGUAGE: Japanese

A review. Mitiglinide calcium hydrate (mitiglinide, Glufast) is a new AB insulinotropic agent of the glinide class with rapid onset. Mitiglinide is thought to stimulate insulin secretion by closing the ATP-sensitive K+ (KATP) channels in pancreatic β -cells, and its early insulin release and short duration of action would be effective in improving postprandial hyperglycemia. In studies of various cloned KATP channels, mitiglinide shows a higher selectivity for the β -cell type of SUR1/Kir6.2 than the cardiac and smooth muscle types of KATP channels in comparison with glibenclamide and glimepiride. In vitro and in vivo studies demonstrated the insulinotropic effect of mitiglinide is more potent than that of nateglinide, and mitiglinide surpassed in controlling postprandial hyperglycemia in normal and diabetic In clin. trials, treatment with mitiglinide provided lasting improvement of postprandial hyperglycemia in Type 2 diabetic patients and decreased the fasting plasma glucose levels and HbA1C values. The incidence of adverse events related to mitiglinide were nearly equivalent to placebo; in particular there was no difference with the frequency of hypoglycemia. results from these studies indicated that mitiglinide could be expected to possess good therapeutic features of being effective in reducing postprandial glucose excursions in the early stage of Type 2 diabetes and less incidence of events suggestive of hypoglycemia.

L62 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2007:404898 HCAPLUS Full-text

DOCUMENT NUMBER: 146:372816

TITLE: Mitgilinide and α-glucosidase inhibitor

combination for type 2 diabetes therapy

INVENTOR(S): Kiyono, Yuji; Okubo, Yoshio; Mototani,

Katsumi; Mikoshiba, Imao

PATENT ASSIGNEE(S): Kissei Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007091641	Α	20070412	JP 2005-283608	20050929
PRIORITY APPLN. INFO.:			JP 2005-283608	20050929

AB Disclosed are a pharmaceutical preparation for controlling the condition of type 2 diabetes comprising the combination of mitiglinide or a pharmacol. acceptable salt or hydrate thereof and an α -glycosidase inhibitor, e.g., voglibose. The pharmaceutical preparation shows a potent effect of decreasing the morning fasting blood glucose level, the postprandial blood glucose level and HbA1c in a patient with type 2 diabetes and can ameliorate insulin resistance.

L62 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:1157536 HCAPLUS Full-text

DOCUMENT NUMBER:

145:477898

TITLE:

Combined pharmaceutical preparation for treatment of

type 2 diabetes

INVENTOR (S):

Kiyono, Yuji; Okubo, Yoshio; Hontani, Katsumi; Mikoshiba, Imao; Ojima, Kazuma

Kissei Pharmaceutical Co., Ltd., Japan PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 29pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT	INFORMATION:

	PATE	ENT 1	. 01			KIN	D :	DATE		1	APPL	ICAT:	ION I	. 07		D	ATE	
							-									-		
WO 2006115115			A1 20061102			WO 2006-JP308110					20060418							
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KΡ,	KR,
			KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		•	SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KZ,	MD,	RU,	TJ,	TM										
D	VTT	ומסג	.NT	TNEO							TD 2	00E-	1210	52		A 21	0050/	120

PRIORITY APPLN. INFO.:

A 20050420 JP 2005-121862 JP 2005-166314 A 20050607

Disclosed are a pharmaceutical preparation for controlling the condition of AB type 2 diabetes, the pharmaceutical preparation comprising the combination of mitiglinide or a pharmacol. acceptable salt or hydrate thereof and an α glycosidase inhibitor (e.g., voglibose, acarbose); and a therapeutic method using the pharmaceutical preparation The pharmaceutical preparation shows an extremely potent effect of decreasing the morning fasting blood glucose level, the postprandial blood glucose level and HbA1c in a patient with type 2 diabetes and can ameliorate glucose spike, insulin resistance and lipid metabolism

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS 13 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L62 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1996:83073 HCAPLUS Full-text

DOCUMENT NUMBER:

124:165270

TITLE:

Therapeutics for peripheral circulation disorders containing (pyridylmethyl)pyrrolidine derivative

INVENTOR(S):

Mikoshiba, Imao; Myata, Hiroshi; Komatsu,

Hidetada; Hoyano, Takeshi; Kiguchi, Sumyoshi

PATENT ASSIGNEE(S):

Kissei Pharmaceutical, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07304671	Α	19951121	JP 1994-130781	19940509

PRIORITY APPLN. INFO.: GI

 $H_2OC(CH_2)_3CH = CH$

JP 1994-130781

19940509

Ι

Therapeutics for symptoms caused by peripheral circulation disorders contain AB the title derivative (I) or its pharmacol. acceptable salts. The therapeutics are useful for treatment of rhigosis (cool sensation), numbness, and pain. I.HCl (preparation given) significantly improved neurotransmission rate in rats with streptozotocin-induced peripheral circulation disorder.

L62 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1978:115295 HCAPLUS Full-text

DOCUMENT NUMBER:

88:115295

TITLE:

Effect of a combined preparation of aluminum

dihydroxyallantoinate and meta-magnesium

aluminosilicate (Alanta) on acute gastritis in beagles

AUTHOR (S):

Azuma, Hiroshi; Shibata, Nobuo; Mikoshiba, Imao; Minamide, Seiki; Naito, Jun; Matsuda,

Kuniaki; Kumazawa, Nariyuki

CORPORATE SOURCE:

Div. Pharmacol., Kissei Pharm.

Co., Ltd., Matsumoto City, Japan

SOURCE:

Oyo Yakuri (1977), 13(3), 389-98 CODEN: OYYAA2; ISSN: 0369-8033

Journal

DOCUMENT TYPE:

LANGUAGE: Japanese

The inhibitory effect of Alanta [65775-48-6] on gastritis was demonstrated by ΔR histol. examination and also by determination of fibrinolysis.

L62 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1978:99164 HCAPLUS Full-text

DOCUMENT NUMBER:

88:99164

TITLE:

Pharmacological analysis of the combined effect of aluminum dihydroxyallantoinate and meta-magnesium

aluminosilicate

AUTHOR (S):

Azuma, Hiroshi; Naito, Jun; Tamaoki, Hiroshi; Amaki,

Masaharu; Mikoshiba, Imao; Akahane, Masuo

CORPORATE SOURCE:

Div. Pharmacol., Kissei Pharm. Co.

Ltd., Matsumoto City, Japan

SOURCE:

Oyo Yakuri (1977), 13(3), 383-7 CODEN: OYYAA2; ISSN: 0369-8033

DOCUMENT TYPE:

Journal

LANGUAGE:

Japanese

Aldioxa [5579-81-7] (Al dihydroxyallantoinate) dose-dependently inhibited AB stress-induced ulcer in rats. The ED50 of the drug was 523 mg/kg. A slight

86

inhibition of the stress-induced ulcer was elicited by treatment with metamagnesium aluminosilicate (MAS) [1327-43-1]. The ED50 of MAS was 25,500 mg/kg. When aldioxa and MAS were administered in combination in the ratio of 1/9, 1/19 and 1/29, the ED50 values were 1194, 1819 and 5725 mg/kg, resp. The inhibitory effect on the water immersion stress-induced ulcer was also potentiated by combined treatment with aldioxa and MAS. Aldioxa and MAS inhibited pylorus-ligation-induced ulcer in a dose-dependent manner. The ED50 values were 446 and 406 mg/kg,resp. When aldioxa and MAS were administered in the ratio of 1/9, 1/1 and 2/1, the ED50 values were 369, 395, and 405 mg/kg, resp. The inhibitory effect on pylorus-ligation ulcer induction was enhanced in an additive manner by the combined treatment.

=> d 162 7-10 ibib ab

L62 ANSWER 7 OF 10 MEDLINE on STN

ACCESSION NUMBER: 2003177108 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 12694990

TITLE: Rationale and evidence for the use of oxcarbazepine in

neuropathic pain.

AUTHOR: Carrazana Enrique; Mikoshiba Imao

CORPORATE SOURCE: Neuroscience, Clinical Development and Medical Affairs,

Novartis Pharmaceuticals, East Hanover, NJ 07936-1080, USA.

SOURCE: Journal of pain and symptom management, (2003 May) Vol. 25,

No. 5 Suppl, pp. S31-5. Ref: 25

Journal code: 8605836. ISSN: 0885-3924.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

General Review; (REVIEW)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200307

ENTRY DATE: Entered STN: 17 Apr 2003

Last Updated on STN: 3 Jul 2003 Entered Medline: 2 Jul 2003

AB Oxcarbazepine is a second-generation antiepileptic drug (AED) with proven efficacy in managing partial epileptic seizures, with or without secondary generalization, in adults and children. The overlap between the underlying pathophysiologic mechanisms of some epilepsy models and neuropathic pain models supports the rationale for using certain AEDs in the treatment of neuropathic pain. Several AEDs have reportedly produced analgesia in a range of neuropathic pains, including painful diabetic neuropathy (PDN) and postherpetic neuralgia. Increasing evidence suggests that oxcarbazepine can provide significant analgesia in several neuropathic pain conditions, including trigeminal neuralgia and PDN, and is also may be effective in treating neuropathic pain refractory to other AEDs, such as carbamazepine and gabapentin. The analgesic effects of oxcarbazepine, and its generally improved safety and tolerability profile compared with other standard AEDs, suggests that oxcarbazepine will be an important addition to the neuropathic pain armamentarium. The rationale and evidence to support the efficacy of oxcarbazepine are presented here.

L62 ANSWER 8 OF 10 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:442810 BIOSIS Full-text

DOCUMENT NUMBER: PREV20000442810

TITLE: Re-evaluation of exercise prescription for Japanese type 2

diabetic patients by ventilatory threshold.

AUTHOR(S): Kunitomi, Mie [Reprint author]; Takahashi, Kayo; Wada, Jun;

Suzuki, Hisao; Miyatake, Nobuyuki; Ogawa, Saeko;

Ohta, Sachiko; Sugimoto, Hikaru; Shikata, Kenichi; Makino,

Hirofumi

CORPORATE SOURCE: Department of Medicine III, Okayama University Medical

School, 2-5-1 Shikata-cho, Okayama, 700-8558, Japan

SOURCE: Diabetes Research and Clinical Practice, (October, 2000)

Vol. 50, No. 2, pp. 109-115. print.

CODEN: DRCPE9. ISSN: 0168-8227.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Oct 2000

Last Updated on STN: 10 Jan 2002

Prescription of aerobic exercise for Type 2 diabetes mellitus (Type 2 DM) in AB clinical practice is frequently based on exercise intensity at maximum heart rate (60 < HRmax < 79%), heart rate reserve (50 < HRreserve < 74%), and rating of perceived exertion (12 < RPE < 13). We examined these parameters in Japanese males with Type 2 DM at ventilatory threshold (VT) to investigate the exercise capacity of Type 2 DM patients and re-evaluate the exercise prescription. Fifty-six Japanese Type 2 DM males without autonomic neuropathy (age, 53.5 + 7.7 years; body mass index (BMI), 23.7 + 3.6 kg/m2) were enrolled and compared with 56 age- and BMI-matched healthy Japanese males. was determined breath by breath during exercise test using a ramp protocol and rates of oxygen consumption (VO2), work rate (WR), HR, DELTAHR, %HRmax, %HRreserve, and RPE were measured at VT. Type 2 DM patients had significantly lower VO2 (3.6 +- 0.4 metabolic equivalents (METs)) and WR (62 +- 14 W) than controls (VO2, 3.9 +- 0.6 METs; WR, 74 +- 13 W). %HRreserve, (32.6 +- 7.7%) was also significantly lower compared with controls (37.6 +- 8.3%), while %HRmax, was not different. RPE was also similar in diabetics (12.4 +- 1.5) and controls (12.9 +- 1.2), however, it was significantly lower in diabetic patients aged 60-69 years (11.8 +- 2.0) and those with distal symmetric sensory neuropathy (12.2 +- 1.0). Our results indicate reduced exercise capacity in Japanese Type 2 DM males and the exercise intensity of 60%HRmax, 30%HRreserve, and RPE 12 is recommended in elderly diabetics and those with diabetic sensory neuropathy.

L62 ANSWER 9 OF 10 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2003151062 EMBASE Full-text

TITLE: Rationale and evidence for the use of oxcarbazepine in

neuropathic pain.

AUTHOR: Carrazana E.; Mikoshiba I.

CORPORATE SOURCE: Dr. E. Carrazana, Neurosci., Clin. Devmt./Med. Affairs,

Novartis Pharmaceuticals, Building 403, 59 Route 10, East

Hanover, NJ 07936-1080, United States

SOURCE: Journal of Pain and Symptom Management, (1 May 2003) Vol.

25, No. 5 SUPPL., pp. S31-S35. .

Refs: 25

ISSN: 0885-3924 CODEN: JPSMEU

COUNTRY: United States
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 003 Endocrinology

008 Neurology and Neurosurgery 037 Drug Literature Index

038 Adverse Reactions Titles

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 24 Apr 2003

Last Updated on STN: 24 Apr 2003

Oxcarbazepine is a second-generation antiepileptic drug (AED) with proven AB efficacy in managing partial epileptic seizures, with or without secondary generalization, in adults and children. The overlap between the underlying pathophysiologic mechanisms of some epilepsy models and neuropathic pain models supports the rationale for using certain AEDs in the treatment of neuropathic pain. Several AEDs have reportedly produced analgesia in a range of neuropathic pains, including painful diabetic neuropathy (PDN) and postherpetic neuralgia. Increasing evidence suggests that oxcarbazepine can provide significant analgesia in several neuropathic pain conditions, including trigeminal neuralgia and PDN, and is also may be effective in treating neuropathic pain refractory to other AEDs, such as carbamazepine and gabapentin. The analgesic effects of oxcarbazepine, and its generally improved safety and tolerability profile compared with other standard AEDs, suggests that oxcarbazepine will be an important addition to the neuropathic pain armamentarium. The rationale and evidence to support the efficacy of oxcarbazepine are presented here. . COPYRGT. 2003 U.S. Cancer Pain Relief Committee. Published by Elsevier. All rights reserved.

L62 ANSWER 10 OF 10 DRUGU COPYRIGHT 2007 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-26991 DRUGU T S Full-text

TITLE: Neuropathic pain: from mechanisms to treatment strategies.

Rationale and evidence for the use of oxcarbazepine in

neuropathic pain.

AUTHOR: Carrazana E; Mikoshiba I

CORPORATE SOURCE: Novartis; Kissei

LOCATION: East Hanover, N.J., USA; Tokyo, Jap.

SOURCE: J.Pain Symptom Manage. (25, No. 5, Suppl., S31-S35, 2003) 1

Fig. 1 Tab. 25 Ref.

CODEN: JPSMEU ISSN: 0885-3924

AVAIL. OF DOC.: Neuroscience, Clinical Development and Medical Affairs,

Novartis Pharmaceuticals, Building 403, Room 362, 59 Route

10, East Hanover, NJ, 07936-1080, U.S.A.

LANGUAGE: English
DOCUMENT TYPE: Journal
FIELD AVAIL.: AB; LA; CT
FILE SEGMENT: Literature

The use of oxcarbazepine in neuropathic pain is reviewed. Oxcarbazepine as a treatment for neuropathic pain including clinical evidence in trigeminal neuralgia, other neuropathic pain conditions and painful diabetic neuropathy are discussed. Oxcarbazepine is an effective and well tolerated treatment for neuropathic pain. This efficacy has been noted in a broad range of neuropathic pain conditions, including trigeminal neuralgia and painful diabetic neuropathy, and in patients refractory to other antiepileptic drugs, such as carbamazepine and gabapentin.

=> d his nofile

(FILE 'HOME' ENTERED AT 14:30:01 ON 24 MAY 2007) FILE 'HCAPLUS' ENTERED AT 14:31:22 ON 24 MAY 2007 1 SEA ABB=ON PLU=ON US20050215607/PN L1 D ALL 1 SEA ABB=ON PLU=ON US20050267195/PN L2 D ALL L3 2 SEA ABB=ON PLU=ON L1 OR L2 FILE 'REGISTRY' ENTERED AT 14:34:02 ON 24 MAY 2007 1 SEA ABB=ON PLU=ON 145375-43-5/RN T.4 1 SEA ABB=ON PLU=ON 207844-01-7/RN L5 1 SEA ABB=ON PLU=ON MITIGLINIDE/CN L6 L7 O SEA ABB=ON PLU=ON MITIGLINIDE CALCIUM HYDRATE/CN L8 2 SEA ABB=ON PLU=ON (L4 OR L5 OR L6) FILE 'HCAPLUS' ENTERED AT 14:35:34 ON 24 MAY 2007 97 SEA ABB=ON PLU=ON L8 OR MITIGLINIDE CALCIUM HYDRATE/OBI L9 87 SEA ABB=ON PLU=ON MITIGLINIDE/OBI OR MITI/OBI(W)GLINIDE/OBI 108 SEA ABB=ON PLU=ON L9 OR L10 L10 L11 L12 3944 SEA ABB=ON PLU=ON DIABET?/OBI (L) (PROGRESS?/OBI OR COMPLICAT ?/OBI) L13 2160940 SEA ABB=ON PLU=ON (INHIBIT?/OBI OR HINDER?/OBI OR IMPED?/OBI OR REDUC?/OBI OR REDN#/OBI OR SUPPRESS?/OBI OR PREVENT?/OBI OR BLOCK?/OBI OR ELIMINAT?/OBI) 1486 SEA ABB=ON PLU=ON L12 AND L13 L14 L15 1486 SEA ABB=ON PLU=ON L12 (P) L13 3 SEA ABB=ON PLU=ON L10 AND L15 L16 D SCAN FILE 'STNGUIDE' ENTERED AT 14:39:04 ON 24 MAY 2007 FILE 'HCAPLUS' ENTERED AT 14:40:20 ON 24 MAY 2007 L17 3 SEA ABB=ON PLU=ON L11 (P) L12 O SEA ABB=ON PLU=ON L17 NOT L16 L18 E DIABETS+PFT,OLD,NT/CT 110617 SEA ABB=ON PLU=ON DIABET?/OBI L19 54 SEA ABB=ON PLU=ON L11 AND L19 L20 28 SEA ABB=ON PLU=ON L13 AND L20 L21 L22 28 SEA ABB=ON PLU=ON L13 (5A) L20 D KWIC 1-5 D L22 TI 1-5 QUE ABB=ON PLU=ON AY<2004 OR PRY<2004 OR PY<2004 OR MY<2004 L23 OR REVIEW/DT 17 SEA ABB=ON PLU=ON L22 AND L23 L24 L25 3 SEA ABB=ON PLU=ON L10 AND L12 L26 17 SEA ABB=ON PLU=ON L24 OR L25 271 SEA ABB=ON PLU=ON HYPERGLYCEM?/OBI (3A) (POST/OBI(W)PRANDIAL/ L27 OBI OR POSTPRANDIAL/OBI) L28 3 SEA ABB=ON PLU=ON L11 AND L27 D TI 1-3 13237 SEA ABB=ON PLU=ON HYPERGLYCEM?/OBI L29 L30 · 13237 SEA ABB=ON PLU=ON L27 OR L29 L31 7 SEA ABB=ON PLU=ON L11 AND L30 L32 7 SEA ABB=ON PLU=ON L28 OR L31 24 SEA ABB=ON PLU=ON L32 OR L24 L33

```
SAVE TEMP L33 FIN155HCAP/A
               E MIKOSHIBA I?/AU
L34
            15 SEA ABB=ON PLU=ON "MIKOSHIBA IMAO"/AU
               E SUZUKI H?/AU
L35
           328 SEA ABB=ON PLU=ON SUZUKI HISAO/AU
               E KIYONO Y?/AU
L36
             9 SEA ABB=ON PLU=ON KIYONO YUJI/AU
L37
           346 SEA ABB=ON PLU=ON (L34 OR L35 OR L36)
               E KISSEI PHARMACEUTICAL/CO, PA, CS
           673 SEA ABB=ON PLU=ON ("KISSEI PHARMACEUTICAL"/CO OR "KISSEI
L38
               PHARMACEUTICAL"/PA OR "KISSEI PHARMACEUTICAL"/CS OR "KISSEI
               PHARMACEUTICAL CO"/CO OR "KISSEI PHARMACEUTICAL CO LTD"/CO OR
               "KISSEI PHARMACEUTICAL CO LTD"/PA OR "KISSEI PHARMACEUTICAL CO
               LTD"/CS OR "KISSEI PHARMACEUTICAL CO LTD CENTRAL RESEARCH
               LABORATORIES"/CO OR "KISSEI PHARMACEUTICAL CO LTD CENTRAL
               RESEARCH LABORATORIES HOTAKA 399 83 JAPAN"/CS OR "KISSEI
               PHARMACEUTICAL CO LTD JAPAN"/PA OR "KISSEI PHARMACEUTICAL CO
               LTD JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD NAGANO 399 8304
               JAPAN"/CS OR "KISSEI PHARMACEUTICAL CO LTD PHARMACEUTICAL
               RESEARCH LABORATORIES"/CO OR "KISSEI PHARMACEUTICAL CO LTD
               PHARMACEUTICAL RESEARCH LABORATORIES NAGANO 399 8304 JAPAN"/CS
               OR "KISSEI PHARMACEUTICAL CO LTD SHINSHU UNIVERSITY"/CO OR
               "KISSEI PHARMACEUTICAL COMPANY"/CO OR "KISSEI PHARMACEUTICAL
               COMPANY LIMITED"/CO OR "KISSEI PHARMACEUTICAL COMPANY LTD"/CO
               OR "KISSEI PHARMACEUTICAL INDUSTRY CO LTD"/CO OR "KISSEI
               PHARMACEUTICAL JAPAN"/PA OR "KISSEI PHARMACEUTICAL JAPAN"/CS)
L39
           722 SEA ABB=ON PLU=ON KISSEI PHARMA?/PA,CS,CO
           722 SEA ABB=ON PLU=ON L38 OR L39
L40
             8 SEA ABB=ON PLU=ON L37 AND L40
L41
             6 SEA ABB=ON PLU=ON L41 NOT L33
L42
               SAVE TEMP L42 FIN155HCAAU/A
     FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 14:54:53 ON 24 MAY 2007
            84 SEA ABB=ON PLU=ON L8
L43
           172 SEA ABB=ON PLU=ON L10
L44
L45
           10 SEA ABB=ON PLU=ON MITIGLINIDE CALCIUM HYDRATE
L46
           173 SEA ABB=ON PLU=ON (L43 OR L44 OR L45)
L47
           110 SEA ABB=ON PLU=ON L46 AND (L19 OR L27 OR L29)
            46 SEA ABB=ON PLU=ON L47 AND L23
L48
            33 SEA ABB=ON PLU=ON L48 (P) L13
L49
               D TRIAL 1-5
               SAVE TEMP L49 FIN155MULTI/A
L50
            27 SEA ABB=ON PLU=ON MIKOSHIBA I?/AU
L51
         22092 SEA ABB=ON PLU=ON SUZUKI H?/AU
L52
            34 SEA ABB=ON PLU=ON SUZUKI HISAO/AU
L53
             2 SEA ABB=ON PLU=ON KIYONO YUJI/AU
            63 SEA ABB=ON PLU=ON L50 OR L52 OR L53
L54
            2 SEA ABB=ON PLU=ON L50 AND L52 OR L53
L55
L56
             2 SEA ABB=ON PLU=ON L54 AND L46
             2 SEA ABB=ON PLU=ON L55 OR L56
L57
L58
             6 SEA ABB=ON PLU=ON L54 AND (L19 OR L27 OR L29)
L59
             6 SEA ABB=ON PLU=ON L57 OR L58
               D L59 TI 1-6
L60
             6 SEA ABB=ON PLU=ON L59 NOT L49
```

FILE 'STNGUIDE' ENTERED AT 15:06:18 ON 24 MAY 2007

SAVE TEMP L60 FIN155MULAU/A

D QUE L33

D QUE L49

FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 15:07:58 ON 24 MAY 2007

L61

49 DUP REM L33 L49 (8 DUPLICATES REMOVED) ANSWERS '1-24' FROM FILE HCAPLUS ANSWERS '25-42' FROM FILE MEDLINE ANSWERS '43-45' FROM FILE EMBASE ANSWERS '46-49' FROM FILE DRUGU

D L61 1-24 IBIB ED ABS HITIND

D L61 25-49 IBIB AB IND

D QUE L42

D QUE L60

L62

10 DUP REM L42 L60 (2 DUPLICATES REMOVED)

ANSWERS '1-6' FROM FILE HCAPLUS

ANSWER '7' FROM FILE MEDLINE ANSWER '8' FROM FILE BIOSIS

ANSWER '9' FROM FILE EMBASE

ANSWER '10' FROM FILE DRUGU

D L62 1-6 IBIB ABS

D L62 7-10 IBIB AB





A service of the National Library of Medicine and the National Institutes of Health

My NCBI Welcome megs **Entre**

All Databases

PubMed

Nucleotide

Protein

Genome

Search numbers may not be continuous; all searches are represented. To save search indefinitely, click query # and select Save in My NCBI.

To combine searches use #search, e.g., #2 AND #3 or click query # for more

Structure

OMIM

Journ

PMC

Search PubMed

options.

for mitiglinide and (diabetic OR diabetes or postprand

Preview

Go Clear

Search

Preview/Index History Clipboard • Search History will be lost after eight hours of inactivity.

About Entrez

Text Version

Entrez PubMed Overview Help | FAQ **Tutorials**

New/Noteworthy

E-Utilities **PubMed Services**

Journals Database MeSH Database Single Citation Matcher **Batch Citation** Matcher Clinical Queries **Special Queries** LinkOut

My NCBI

Related Resources **Order Documents NLM Mobile NLM Catalog NLM Gateway** TOXNET Consumer Health Clinical Alerts ClinicalTrials.gov PubMed Central

Most Recent Queries

Time Result

#1 Search mitiglinide and (diabetic OR diabetes or postprandial or gylcemic or gylcemia or complications)

17:34:52

33

Clear History

Write to the Help Desk NCBI | NLM | NIH Department of Health & Human Services Privacy Statement | Freedom of Information Act | Disclaimer